

AD-A212 357

ANALYSIS OF THE SUBMARINE APPENDAGE FLOW FIELD

**USER'S MANUAL
FOR
PEPSIG (CORNER VORTEX VERSION)**

REPORT NO. R88920028-F (b)

Ralph Levy

Scientific Research Associates
P.O. Box 1058, 50 Nye Road
Glastonbury, Connecticut 06033

Contract No. N000167-86-C-0048

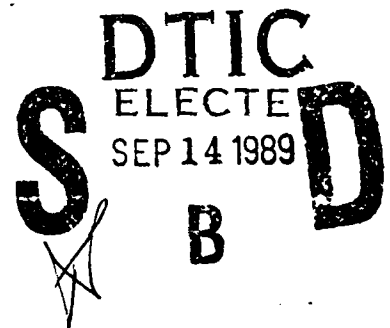
Sponsored by:

Office of Naval Research
800 Quincy St.
Arlington, VA 22217

Under the Applied Hydrodynamics Research Program

APPROVED FOR PUBLIC RELEASE;
DISTRIBUTION UNLIMITED

August 1988



89 9 14 067

PEPSIG (CORNER VORTEX VERSION) INPUT DESCRIPTION

Input to PEP SIG (Corner Vortex version) consists of an initial card specifying the type of calculation to perform and a title, plus three namelists. Many of the input parameters have default values and do not need to be specified by the user unless some other value is desired. The type (REAL or INTEGER) of the input parameters follows standard FORTRAN convention, unless stated otherwise. (I.e., those starting with I, J, K, L, M, or N are INTEGER, and the remainder are REAL).

TITLE CARD

MODE An integer in column 1 specifying the type of calculation to be performed, as follows:

- 3 to compute and store geometric parameters for potential flow calculation.
- 2 to perform potential flow calculation.
- 1 to perform viscous flow calculation.
- 0 to terminate run.

TITLE A descriptive title in columns 2-33 used on the printed output and in the plot file.

NAMELIST RESTR

The parameters specified in this namelist are primarily used to control where a restart file is read and/or written. A restart file must be used when changing the polynomials used to specify the geometry, the marching step size DT, the type of output desired, etc.

IRSTIN Marching station number to be read from restart file. $IRSTIN = 0$ implies this is not a restart case. The default value is 0.

IRSTOT The interval for writing onto the restart file (i.e., at station $IRSTIN + IRSTOT$, $IRSTIN + 2 * IRSTOT$, etc.). If $IRSTOT = 0$ no restart file is written. The default value is 0.

NFILE The sequence number in the restart file of the station to be read. E.g., if stations 1, 5, 20, and 24 have been written onto the restart file, and a restart at station 20 is desired, then NFILE should be 3. The default value is 1.

NSAVED The number of stations in the restart file to be saved. E.g., if stations 1, 5, 20, and 24 have been written onto the restart file, and $NSAVED = 3$, then when a restart is next written stations 1, 5, and 20 will be saved and station 24 will be overwritten. The default value is NFILE. Note that if $IRSTIN = IRSTOT$ (see below) and $NFILE = NSAVED$, the same file can be used for reading and writing restart data with destroying any previously saved data.

NOTE: In practice NFILE and NSAVED are both usually defaulted, which results in each write to the restart file overwriting the previously saved station.

JRSTIN Fortran unit number from which restart data will be read. The default value is 11.

JRSTOT Fortran unit number onto which restart data will be written. The default value is 11.

NAMelist FLUIDS

The first group of parameters in this namelist apply to all cases, and are used to set reference conditions, initial profiles, and boundary conditions.

IUNITS 1 Dimensionless input and output.
 2 SI units in input and output.
 3 English units in input and output.
 The default value is 1.

INPOPT Eight options are available for specifying a consistent set of reference conditions. These conditions are also used to set up the initial profiles to start the viscous marching calculation. For INPOPT = 1 to 8, the parameters to be specified by the user are summarized as follows:

NPOPT	PARAMETERS SPECIFIED					
1	CMACH	REY	YZERO	TZERO	PZERO	
2	UZERO	REY	YZERO	TZERO	PZERO	
3	CMACH	REY	YZERO	TZERO	RZERO	
4	UZERO	REY	YZERO	TZERO	RZERO	
5	CMACH	REY	YZERO	SOUND	PZERO	
6	UZERO	REY	YZERO	SOUND	PZERO	
7	CMACH	REY	YZERO	SOUND	RZERO	
8	UZERO	REY	YZERO	SOUND	RZERO	

The default value is 1.

KTURB 0 Laminar flow.
 1 Turbulent flow.
 The default value is 0.

CMACH Reference Mach number. The default value is 0.01.

REY Reference Reynolds number, based on RZERO, UZERO, and

YZERO. The default value is 1.

UZERO Reference velocity. The default value is 1.

YZERO Reference length. The default value is 1.

Accession For	
NTIS GRA&I	<input checked="" type="checkbox"/>
DTIC TAB	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
By _____	
Distribution/	
Availability Codes	
Dist	Avail and/or Special
A-1	



- TZERO** Reference static temperature. The default value is 1.
- PZERO** Reference static pressure. The default value is 1.
- RZERO** Reference static density. The default value is 1.
- SOUND** Reference speed of sound. There is no default value.
- RG** Gas constant. The default value is 1716., which works for both IUNITS = 1 and 3.
- CPR** Reference value for specific heat at constant pressure, used in formula for specific heat as a function of temperature. The default value is 6006., which also works for both IUNITS = 1 and 3.
- BLD** A 6-element array giving the initial boundary layer thicknesses on the four computational surfaces, and on the inner and outer lobe surfaces for a mixer case. The default values are 0., 0., 0., 0.2, 0., and 0.
- VGEN(J,20)** Coefficients of the polynomial specifying the boundary layer thickness along the vertical wall. The independent variable in this polynomial is the height, z . Up to a second-order polynomial may be specified (i.e., $J = 1$ to 3). $J = n$ corresponds to the z to the $(n-1)$ 'th term in the polynomial.
- VGEN(J,19)** Coefficients of the polynomial specifying the boundary layer thickness along the horizontal wall. The independent variable in this polynomial is the distance from the corner, y . Up to a second-order polynomial may be specified (i.e., $J = 1$ to 3). $J = n$ corresponds to the y to the $(n-1)$ 'th term in the polynomial.
- QRATIO** For internal flows - ratio of the average initial velocity at the start of the viscous run to the inlet velocity in the potential flow run. This parameter is used in setting the potential flow pressure field, and is most important when the initial station in the viscous run does not have the same mass flow as the initial station in the potential flow run. To determine what value to use: (1) set QRATIO = 1.0 and run the viscous calculation one step; (2) check the printed output for the value of the average velocity at the initial station (UBAR); (3) run the complete viscous case with QRATIO = UBAR. The default value is 1.
- NS1** 0 Symmetry boundary condition on computational surface 1.
1 Solid wall boundary condition on computational surface 1.
The default value is 0.
- NS2** 0 Symmetry boundary condition on computational surface 2.
1 Solid wall boundary condition on computational surface 2.
The default value is 0.
- NS3** 0 Symmetry boundary condition on computational surface 3.
1 Solid wall boundary condition on computational surface 3.

The default value is 0.

NS4 0 Symmetry boundary condition on computational surface 4.
 1 Solid wall boundary condition on computational surface 4.
The default value is 1.

ISYM Degree of symmetry in the cross-section, i.e., ISYM = 1 for a full 360 degree polar cross section, ISYM = 2 for a 90 degree calculation, ISYM = 4 for a 90 degree calculation, etc. The default value is 2.

IPRD 0 No periodic boundary condition.
 1 Periodic boundary condition in the circumferential direction.
The default value is 0.

NOTE - IPRD = 1 only applies to the NGEOM = 2-5 and 12-15 geometry options. In addition, when IPRD = 1 stretched meshes in the circumferential direction cannot be used.

ILAW 0 Compute the laminar viscosity coefficient from Sutherland's law.
 1 Compute the laminar viscosity coefficient by assuming it is proportional to temperature to the 0.76 power.
 2 Hold the laminar viscosity coefficient constant at its input value (computed from YZERO, UZERO, RZERO, and REY).
The default value is 2.

IVT 0 Hold the specific heat at constant pressure (CP) and the ratio of specific heats (GAMMA) constant at their input values (computed from TZERO).
 1 Treat CP and GAMMA as variable functions of temperature.
The default value is 0.

FLRFC Flare approximation criteria for separated flow regions. If $U < \text{FLRFC} \cdot \text{UAVG}$, U is reset to $\text{FLRFC} \cdot \text{UAVG}$. The default value is 0.025.

The following parameters also apply to all cases, and are used to specify the distribution of grid points in the streamwise direction, and the number of grid points in the transverse directions. The distribution of grid points in the transverse directions is controlled by parameters in namelist GEOM.

T Marching parameter, or streamwise computational coordinate. This is the independent variable used in evaluating the polynomials PCL and PGEO in namelist GEOM. The value of T must be specified at the initial station. After a restart, however, the value is taken from the restart file. There is no default value.

DTE(K) Step size in T for marching step from station IRSTIN to IRSTIN+1. There is no default value. Up to 10 piecewise continuous sections, each beginning at TSECT(K), can be specified. (default K=1).

AP(K) Ratio of successive step sizes in T. I.e., $AP = (T(I+1) - T(I)) / (T(I) - T(I-1))$. The default value is 1.0, corresponding to a constant step size.

Up to 10 piecewise continuous sections, each beginning at TSECT(K), can be specified. (default K=1).

- NS Number of last streamwise station to be computed. I.e., the code will march from stationIRSTIN to station NS. There is no default value.
- NEY Number of grid points in the circumferential direction. There is no default value.
- NEZ Number of grid points in the radial direction. There is no default value.

The following parameters apply to all cases and control the type and amount of output to be printed and/or written to the plot file. (ICOEF also controls other aspects of the calculation).

- ICOEF A 6x20 array containing various switches, limits, etc. See the separate write-up on ICOEF for the details.
- IWSTA A 101-element array specifying station numbers at which output will be printed. This option is activated when ICOEF(2,3) < 0. The default values are all 0.
- KPRT(I) An array of up to 15 elements used to specify additional printout beyond the standard printout. This is done by setting KPRT(I) equal to an integer corresponding to the variable desired. For values from 1 to MVARP (a PARAMETER equal to the number of variables in the Z array), the corresponding variable from the Z array is printed. Additional variables may also be printed. Table ? lists the variables stored in the Z array, plus the others that may be printed. For example, setting KPRT(1) = 62 and KPRT(2) = 71 results in profiles of turbulence mixing length and Mach number being printed.
The default values are all 0.
- IPLOT 0 Do not write a plot file.
 1 Write a file for later post-processing. The stations written into the file are controlled by the values of ICOEF(2,4), ICOEF(2,5), and IPSTA.
The default value is 1.
- IPSTA A 101-element array specifying station numbers at which output will be written into the plot file. This option is activated when ICOEF(2,5) < 0. The default values are all 0.
- NPLT Number of variables written into the plot file at each station. The maximum allowed is MVARP + 10. The default value is 14.
- KPLT(I) An array of NPLT elements specifying which variables are to be written into the plot file. This is done in the same way as the specification of additional printout using KPRT. The defaults for KPLT are such that the following 14 variables are stored in the plot file:

- 1 Reference Cartesian coordinate in x-direction. Here "reference coordinate" refers to a fixed coordinate system, as opposed to one that is perpendicular to a duct centerline, for example.
- 2 Reference Cartesian coordinate in y-direction.
- 3 Reference Cartesian coordinate in z-direction.
- 4 Inviscid velocity (from potential flow file) in relative Cartesian y-direction.
- 5 Inviscid velocity (from potential flow file) in relative Cartesian z-direction.
- 6 Static pressure from solution of Poisson pressure equation.
- 7 Static pressure coefficient.
- 8 Inviscid static pressure coefficient (from potential flow file).
- 9 Streamwise gradient of inviscid static pressure.
- 10 Velocity in relative Cartesian y-direction, non-dimensionalized by UZERO. Here "relative Cartesian" refers to a coordinate system whose x-axis is normal to the plane of the computational station (and therefore the y-z axes are in the plane). The x-direction is often referred to as the streamwise or primary flow direction.
- 11 Velocity in relative Cartesian z-direction, non-dimensionalized by UZERO.
- 12 Velocity in relative Cartesian x-direction (i.e., streamwise direction), non-dimensionalized by UZERO.
- 13 Vorticity component in the streamwise direction, non-dimensionalized by UZERO/YZERO.
- 14 Secondary stream function, non-dimensionalized by UZERO*YZERO.

The following parameters apply to all cases, and control the starting procedure for the initial marching step, and the sequence of solution of the equations.

KSTART 0 Original PEPSIG starting procedure.
 1 Iterative starting procedure.
 2 Split the first marching step into substeps.
 The default value is 0.

DXSTRT Initial marching parameter step size for KSTART = 1 option. The default value is $T+AP*DT$.

- NSTART** Number of iterations in the starting sequence if **KSTART** = 1, or number of substeps if **KSTART** = 2.
The default value is 1.
- ISEQ** 0 Original equation solving sequence in PEPSIG.
 1 Optional equation solving sequence.
 2 Another optional equation solving sequence.
The default value is 0.
- IBETA** 0 Use the small scalar approximation.
 1 Use the pressure approximation.
The default value is 1.

The remaining variables in namelist **FLUIDS** are either not used, apply to options currently being developed, or are for output only.

NAMelist GEOM

The following parameters specify the geometry being analyzed.

- NGEOM** 2 Superelliptic cross-sections, set up through subroutine **TUBE**, with the semi-major axis, ratio of semi-major to semi-minor axis, and exponent specified.
- 3 Superelliptic cross-sections, set up through subroutine **TUBE**, with the semi-major axis, semi-minor axis, and exponent specified.
- 4 Same as **NGEOM** = 2 but with elliptical centerbody.
- 5 Same as **NGEOM** = 3 but with elliptical centerbody.
- 12 Same as **NGEOM** = 2 but going through **ANYGEO** and **GEOTUB** instead of **TUBE**.
- 13 Same as **NGEOM** = 3 but going through **ANYGEO** and **GEOTUB** instead of **TUBE**.
- 14 Same as **NGEOM** = 4 but going through **ANYGEO** and **GEOTUB** instead of **TUBE**.
- 15 Same as **NGEOM** = 5 but going through **ANYGEO** and **GEOTUB** instead of **TUBE**.
- 21 Rectangular cross-sections.
The default value is 2.

NOTE: The **NGEOM** = 2-5 options will eventually be replaced by the **NGEOM** = 12-15 options. Similarly, the **NGEOM** = 21 option may also eventually be replaced by an **ANYGEO** equivalent. See the separate write-up on **ANYGEO** for details on how to add additional user-written geometry packages.

- TSECT(K)** The geometry can be specified in up to 10 piecewise continuous sections. Section **K** begins at **TSECT(K)** (default **K**=1).
- PCLD(J,1,K)** Coefficients of the polynomial specifying the *y* Cartesian component of the centerline location, if **ICOEF(1,9)** = 1; the curvature **CNU** of the centerline (i.e., the reciprocal of the local

radius of curvature), if $\text{ICOEF}(1,9) = 0$; or the Frenet frame curvature CAPP of the centerline, if $\text{ICOEF}(1,9) = 2$. The independent variable in this polynomial is the marching parameter T. Up to a tenth-order polynomial may be specified (i.e., $J = 1$ to 11). $J = n$ corresponds to the x to the $(n-1)$ 'th term in the polynomial. The default values are all 0, corresponding to a straight centerline. Up to 10 piecewise continuous sections, each beginning at $\text{TSECT}(K)$, can be specified. (default $K=1$).

PCLD(J,2,K) Coefficients of the polynomial specifying the z Cartesian component of the centerline location, if $\text{ICOEF}(1,9) = 1$; the curvature CETA of the centerline (i.e., the reciprocal of the local radius of curvature), if $\text{ICOEF}(1,9) = 0$; or the Frenet frame torsion TAU of the centerline, if $\text{ICOEF}(1,9) = 2$. The independent variable in this polynomial is the marching parameter T. Up to a tenth-order polynomial may be specified (i.e., $J = 1$ to 11). $J = n$ corresponds to the x to the $(n-1)$ 'th term in the polynomial. The default values are all 0, corresponding to a straight centerline. Up to 10 piecewise continuous sections, each beginning at $\text{TSECT}(K)$, can be specified. (default $K=1$).

PCLD(J,3,K) Coefficients of the polynomial specifying the x Cartesian component of the centerline location, if $\text{ICOEF}(1,9) = 1$, or the arc length along the centerline, if $\text{ICOEF}(1,9) = 0$ or 2. The independent variable in this polynomial is the marching parameter T. Up to a tenth-order polynomial may be specified (i.e., $J = 1$ to 11). $J = n$ corresponds to the x to the $(n-1)$ 'th term in the polynomial. The default values are all 0, except $\text{PCL}(2,3) = 1$, which says that the marching parameter T is the Cartesian x coordinate. Up to 10 piecewise continuous sections, each beginning at $\text{TSECT}(K)$, can be specified. (default $K=1$).

PGEOD(J,1,K) Coefficients of the polynomial specifying the ratio of the semi-major to semi-minor axis, if $\text{NGEOM} = 2, 4, 32$, or 34, or the semi-minor axis itself if $\text{NGEOM} = 3, 5, 33$, or 35. The independent variable in this polynomial is the marching parameter T. Up to a tenth-order polynomial may be specified (i.e., $J = 1$ to 11). $J = n$ corresponds to the x to the $(n-1)$ 'th term in the polynomial. The default values are all 0, except $\text{PGEOD}(1,1) = 1$. Up to 10 piecewise continuous sections, each beginning at $\text{TSECT}(K)$, can be specified. (default $K=1$).

PGEOD(J,2,K) Coefficients of the polynomial specifying the semi-major axis. The independent variable in this polynomial is the marching parameter T. Up to a tenth-order polynomial may be specified (i.e., $J = 1$ to 11). $J = n$ corresponds to the x to the $(n-1)$ 'th term in the polynomial. The default values are all 0, except $\text{PGEOD}(1,2) = 1$. Up to 10 piecewise continuous sections, each beginning at $\text{TSECT}(K)$, can be specified. (default $K=1$).

PGEOD(J,4,K) Coefficients of the polynomial specifying the exponent of the superellipse. The exponent must be greater than or equal to 2.0 and should be less than or equal to 10.0. The independent variable in this polynomial is the marching parameter T. Up to a tenth-

order polynomial may be specified (i.e., $J = 1$ to 11). $J = n$ corresponds to the x to the $(n-1)$ 'th term in the polynomial. The default values are all 0, except $\text{PGEO}(1,4) = 1$. Up to 10 piecewise continuous sections, each beginning at $\text{TSECT}(K)$, can be specified. (default $K=1$).

PGEO(J,5,K) Coefficients of the polynomial specifying the semi-major axis of the elliptical centerbody. The independent variable in this polynomial is the marching parameter T . Up to a tenth-order polynomial may be specified (i.e., $J = 1$ to 11). $J = n$ corresponds to the x to the $(n-1)$ 'th term in the polynomial. The default values are all 0. Up to 10 piecewise continuous sections, each beginning at $\text{TSECT}(K)$, can be specified. (default $K=1$).

PGEO(J,6,K) Coefficients of the polynomial specifying the semi-minor axis of the elliptical centerbody. The independent variable in this polynomial is the marching parameter T . Up to a tenth-order polynomial may be specified (i.e., $J = 1$ to 11). $J = n$ corresponds to the x to the $(n-1)$ 'th term in the polynomial. The default values are all 0. Up to 10 piecewise continuous sections, each beginning at $\text{TSECT}(K)$, can be specified. (default $K=1$).

RTUBE Radius of small tube surrounding polar coordinate singularity at the centerline. The recommended value is half the distance to the first grid point from the centerline. The default value is 0.01.

ARC Centerline arc length at the start of the calculation.
The default value is 0.0.

IDUCT 0 External flow case. (Requires input reference point for pressure. See $\text{ICOEF}(2,16)$ and $(2,17)$).
1 Internal flow case.
The default value is 1.

ITUBE 0 Print grid point locations in relative Cartesian coordinates.
1 Print grid point locations in polar coordinates.
The default value is 1.
 ITUBE is automatically set equal to 0 if $\text{NGEOM} > 20$.

The following parameters control the distribution of grid points in the transverse directions.

IPA 1 Pack grid points in the circumferential direction using subroutine KGRID , as specified by NCTRK , XAK , and EPSK .
2 Uniformly spaced circumferential grid.
3 Pack grid points in the circumferential direction automatically, based on the cross-section geometry.
The default value is 2.

IPB 1 Pack grid points in the radial direction using subroutine KGRID , as specified by NCTRK , XAK , and EPSK .
2 Uniformly spaced radial grid.
3 Pack grid points in the radial direction as specified by VIS .
The default value is 2.

- VIS** Radial grid packing parameter used when $IPB = 3$. A value of 0.15 gives a loosely packed grid near the outer wall, and a value of 0.6 gives a very tightly packed grid near the outer wall. For laminar flow, values of 0.15 to 0.4 are recommended. For turbulent flow, values of 0.4 to 0.6 are recommended. The default value is 1. (why, I don't know).
- NCTRK(J)** Number of locations between end points, in transverse computational coordinate directions ($J = 1$ and $J = 2$) about which grid points are to be packed using KGRID. The maximum value allowed is 10. There are no default values.
- XAK(I,J)** Non-dimensional locations (i.e., from 0.0 to 1.0), in transverse computational coordinate directions ($J = 1$ and $J = 2$) about which grid points are to be packed using KGRID. $XAK(1,J)$ and $XAK(NCTRK(J)+2,J)$ should always be 0.0 and 1.0, respectively. The subscript I runs from 1 to $NCTRK(J)+2$. There are no default values.
- EPSK(I,J)** Parameter specifying the degree of packing about the point $XAK(I,J)$. It can be thought of as the length of the interval about $XAK(I,J)$ in which points are packed. Smaller values of EPSK result in tighter packing. If $EPSK(I,J)$, corresponding to the location $XAK(I,J)$, is greater than the distance to the location $XAK(I-1,J)$ or $XAK(I+1,J)$, no packing is done about $XAK(I,J)$. Therefore, since $XAK(I,J)$ can at most be 1.0, an easy way to not pack at $XAK(I,J)$ is to set $EPSK(I,J) = 1.0$. There are no default values.

NAMelist VORTEX

The parameters specified in this namelist define the forced vortex at the initial value surface.

- RCORE** Radius of the core of the forced vortex.
- QTEDGE** Strength of the forced vortex specified as the velocity at the edge of the core. Within the core the vortex strength is $\Omega = 2 * QTEDGE / RCORE$.
- ZZERO** Location of the center of the forced vortex in the transverse initial value surface. ZZERO is a complex number, so the y,z location of the vortex is specified in the form (y,z).

PEPSIG (CORNER VORTEX VERSION) ICOEF OPTIONS

ICOEF is a 6x20 array read in namelist FLUIDS that contains various switches, limits, etc. Some of these apply to both the potential flow (MODE=2) and viscous flow (MODE=1) calculations, some to only one or the other, and some to features in the code that are still under development. For the average user, many, if not most, of these options will have little significance. Those most likely to be needed by the typical user are marked with an asterisk. Except where noted, setting the value to 0 turns the option off. Except where noted, the default values are all zero.

ICOEF(1,n)

n	Description
1	1 Print initial station values before starting procedure.
2	1 Momentum integral boundary layer calculation for straight pipe flow, with the correct area variation, as a basis for computing the turbulence mixing length. The default value is 1.
3	Maximum number of iterations in ADI for scalar potential solution and for Poisson pressure equation solution. The default value is 200.
4	Maximum number of iterations in ADI3D for potential flow solution. The default value is 200.
5	Maximum number of iterations in PRIMRY for computation of one-dimensional viscous pressure gradient correction. The default value is 10.
6	0 Linear interpolation on the potential flow file. 1 Potential flow pressure coefficient set equal to 0. 2 Quadratic interpolation on the potential flow file. The default value is 1.
7	Not used.
8	1 Print the Jacobian matrix at each grid point.
9	0 Specify the centerline shape (array PCL) by the distribution of curvature and arc length. 1 Specify the centerline shape (array PCL) by Cartesian coordinate location. 2 Specify the centerline shape (array PCL) by Frenet frame parameters.

- 10 1 Print the secondary velocities in the orthogonal reference coordinates as computed during the scalar potential and coupled vorticity-stream function solutions.
- 11 1 Print the final computed velocities in the orthogonal reference coordinates.
- 12 <0 Print iteration data in ADI2X2 during the coupled vorticity-stream function solution every |ICOEF(1,12)| iterations.
0 Print namelist SCL2X2 in subroutine SCALE.
1 Same as 0, plus print of coefficients of input equations (first iteration only), plus iteration data every iteration.
2 Same as 1, plus print of coefficients of equations sent to matrix inverter each sweep, and resulting solution.
3 Same as 2, plus print from matrix inverter.
The default value is -5.
- 13 <0 Print iteration data in ADI during solution of scalar potential and Poisson pressure equations every |ICOEF(1,13)| iterations.
0 Print iteration data every iteration.
1 Same as 0, plus print of namelists TRMDMP, DTADI2, and DUMP in subroutine ADI.
2 Same as 1, plus print of coefficients of input equations (first iteration only).
3 Same as 2, plus print of coefficients of equations sent to matrix inverter each sweep, and resulting solution.
4 Same as 3, plus print from matrix inverter.
5 Same as 1.
The default value is -5.
- 14 <0 Print iteration data in ADI during solution of streamwise momentum every |ICOEF(1,13)| iterations (if ICOEF(5,5) = 0).
0 Print iteration data every iteration.
1 Print namelists TRMDMP, DTADI2, and DUMP in subroutine ADI during solution of streamwise momentum equation.
2 Same as 1, plus print of coefficients of input equations (first iteration only).
3 Same as 2, plus print of coefficients of equations sent to matrix inverter each sweep, and resulting solution.
4 Same as 3, plus print from matrix inverter.
5 Same as 1.
The default value is -5.
- 15 1 Print from subroutine FRAME.
- 16 1 Print of initial profiles from subroutine IPROF, MXPROF, or MYPROF.
- 17 2 Print coefficients of Laplace's equation during potential flow solution.
- 18 1 Print of physical coordinates, computational coordinates, and difference weights.

- 19 1 Print of data read from potential flow file.
- 20 For KSTART = 1 or 2 option, output is printed during starting procedure every ICOEF(1,20)'th iteration or sub-step.

ICOEF(2,n)

n Description

- 1 Maximum number of iterations in ADI2X2 for coupled vorticity-stream function solution. The default value is 200.
- 2, 3 For ICOEF(2,3) greater than or equal to zero, computed profiles are printed every ICOEF(2,3)'th station starting at station ICOEF(2,2). If ICOEF(2,3) is less than zero, profiles are printed at stations specified by the array IWSA. The defaults are 0 for ICOEF(2,2) and 1 for ICOEF(2,3).
- 4, 5 For ICOEF(2,5) greater than or equal to zero, computed results are written into the plot file every ICOEF(2,5)'th station starting at station ICOEF(2,4). If ICOEF(2,5) is less than zero, results are written into the plot file at stations specified by the array IPSTA. The defaults are 0 for ICOEF(2,4) and 1 for ICOEF(2,5).
- 6 If ICOEF(2,6) = 1, the reference Cartesian velocity components u, w, and v are put into positions 4, 5, and 6 in the plot file (overwriting KPLT(4), KPLT(5), and KPLT(6)). These values are useful for particle tracing routines.
- 7-12 Not used.
- 13 1 Print non-convergence message in ADI.
- 14 1 Non-dimensionalize all printed velocities by the average streamwise velocity at the initial station.
- 15 Used by the code to keep track of the number of points in separated flow regions.
- 16 Grid point index in the circumferential direction specifying the location of the reference pressure when using the external flow option (IDUCT = 0).
- 17 Grid point index in the radial direction specifying the location of the reference pressure when using the external flow option (IDUCT = 0).
- 18 1 Print KGRID output.
 2 Print KGRID output, plus KGRID iteration data.
- 19 1 Print cross-plane grid point coordinates when ICOEF(2,20) = 1.

- 20 1 Print geometry parameters computed during a MODE = 3 calculation (geometry set-up for potential flow).

ICOEF(3,n)

- | n | Description |
|-------|---|
| 1-2 | Not used. |
| 3 | Results are printed at every (ICOEF(3,3)+1)'th grid point in the IY (circumferential) direction. |
| 4 | Results are printed at every (ICOEF(3,4)+1)'th grid point in the JZ (radial) direction. |
| 5 | Results are stored in the plot file at every (ICOEF(3,5)+1)'th grid point in the IY (circumferential) direction. |
| 6 | Results are stored in the plot file at every (ICOEF(3,6)+1)'th grid point in the JZ (radial) direction. |
| 7 | 0 Ignore phi-velocity terms when computing transverse velocity gradients as part of the computation of transverse pressure gradients in the Poisson pressure equation, and in the computation of the vorticity vector.
1 Include the phi-velocity terms.
The default value is 1. |
| 8-9 | Not used. |
| 10 | 0 Potential flow pressure coefficient from potential flow file.
1 Potential flow velocity from potential flow file.
To get potential flow pressure coefficient and velocity from potential flow file. ICOEF(3,10) is automatically set equal to ICOEF(5,11) if ICOEF(5,11) = 0 or 1. If ICOEF(5,11) = 2, ICOEF(3,10) can be 0, 1, or 2. |
| 11 | Not used. |
| 12 | 1 Smooth the potential flow pressure coefficient (or velocity if ICOEF(5,11) = 1) in the streamwise direction. |
| 13 | 1 Print normalized arc-lengths when ICOEF(2,20) = 1. |
| 14 | 1 Print absolute Cartesian coordinates when ICOEF(2,20) = 1. |
| 15 | 1 Print elements of Jacobian grid transformation matrix when ICOEF(2,20) = 1. |
| 16-20 | Not used. |

ICOEF(4,n)

n	Description
1	Maximum pseudo-time step size used in ADI for solution of the scalar potential, energy, and swirl equations is divided by the factor $2^{**}ICOEF(4,1)$.
2	Minimum pseudo-time step size used in ADI for solution of the scalar potential, energy, and swirl equations is divided by the factor $2^{**}ICOEF(4,2)$.
3	0 BETA = 1.0 (backward streamwise differencing) in ADI. 1 BETA = 0.5 (Crank-Nicholson streamwise differencing) in ADI.
4	0 Use local minimum time step in ADI. 1 Use local maximum time step in ADI.
5	Maximum pseudo-time step size used in ADI2X2 for solution of the coupled vorticity-stream function equations is divided by the factor $2^{**}ICOEF(4,5)$.
6	Minimum pseudo-time step size used in ADI2X2 for solution of the coupled vorticity-stream function equations is divided by the factor $2^{**}ICOEF(4,6)$.
7	Maximum pseudo-time step size computed by SCALE for the source term in the solution of the coupled vorticity-stream function equations is divided by the factor $2^{**}ICOEF(4,7)$.
8	0 BETA = 1.0 (backward streamwise differencing) in ADI2X2. 1 BETA = 0.5 (Crank-Nicholson streamwise differencing) in ADI2X2.
9	Maximum pseudo-time step size used in ADI3D for solution of the potential flow equation is divided by the factor $2^{**}ICOEF(4,9)$.
10	Minimum pseudo-time step size used in ADI3D for solution of the potential flow equation is divided by the factor $2^{**}ICOEF(4,10)$.
11	-1 Use local mean time step in ADI3D. 0 Use local minimum time step in ADI3D. 1 Use local maximum time step in ADI3D. The default value is -1.
12	0 BETA = 1.0 (backward streamwise differencing) in ADI3D. 1 BETA = 0.5 (Crank-Nicholson streamwise differencing) in ADI3D.
13	Convergence criteria in ADI for scalar potential, Poisson pressure, energy, and swirl equations is multiplied by the factor $10^{**}ICOEF(4,13)$.

- 14 Convergence criteria in ADI2X2 for the first equation (vorticity) is multiplied by the factor $10^{**}ICOEF(4,14)$.
- 15 Convergence criteria in ADI2X2 for the second equation (stream function) is multiplied by the factor $10^{**}ICOEF(4,15)$.
- 16 Convergence criteria in ADI3D is multiplied by the factor $10^{**}ICOEF(4,16)$.
- 17 Number of time step cycles used in ADI3D for iterative solution of the potential flow equation. The maximum number is 3. The default value is 3.
- 18
- 1 Base the pseudo-time step for the first cycle in ADI3D on a combination of the magnitudes of the finite-difference operators in the circumferential, radial, and streamwise directions.
 - 2 Base the time step on a combination of the circumferential and radial directions.
 - 3 Base the time step on a combination of the radial and streamwise directions.
 - 4 Base the time step on a combination of the circumferential and streamwise directions.
 - 5 Base the time step on the circumferential direction.
 - 6 Base the time step on the radial direction.
 - 7 Base the time step on the streamwise direction.
- The default value is 5.
- 19 Same as $ICOEF(4,18)$, except for second cycle. The default value is 6.
- 20 Same as $ICOEF(4,18)$, except for third cycle. The default value is 7.

ICOEF(5,n)

- | n | Description |
|---|--|
| 1 | 1 Set the rotational part of the cross-flow velocity (computed during the coupled vorticity-stream function solution) to zero. |
| 2 | -1 Solve the Poisson pressure equation, but get the density from the potential flow pressure.
0 Solve the Poisson pressure equation, and get the density from the viscous flow pressure.
1 Skip solving the Poisson pressure equation, and get the density from the potential flow pressure.
The default value is -1. |
| 3 | Used by the program in subroutine COEFVS. Do not change. |

- 4 0 First order wall vorticity boundary condition.
 1 Second order wall vorticity boundary condition.
- 5 0 Iterate the primary momentum equation to convergence each
 marching step (mainly important in separated flow regions).
 If used, convergence criteria (controlled by ICOEF(5,8)) should
 be tightened.
 1 No iteration. The default value is 1.
- 6 Maximum pseudo-time step size used in ADI for solution of the
 primary momentum equation is divided by the factor $2^{**}ICOEF(5,6)$.
 This only applies if iteration is used ($ICOEF(5,5) = 0$).
- 7 Minimum pseudo-time step size used in ADI for solution of the
 primary momentum equation is divided by the factor $2^{**}ICOEF(5,7)$.
 This only applies if iteration is used ($ICOEF(5,5) = 0$).
- 8 Convergence criteria in ADI for primary momentum equation is
 multiplied by the factor $10^{**}ICOEF(5,8)$. This only applies if
 iteration is used ($ICOEF(5,5) = 0$).
- 9 <0 if estimated initial velocity profiles are given as velocity
 components in the body-fitted computational coordinate system
 (instead of the centerline coordinate system).
- 10 0 No slip of secondary velocities.
 1 Slip of secondary velocities.
 The default value is 0 for IBETA = 1, and 1 for IBETA = 0.
- 11 0 Potential flow solution from a pressure file (or to store a
 pressure file if MODE = 2).
 1 Potential flow solution from a velocity file (or to store a
 velocity file if MODE = 2).
 2 Potential flow solution from a file containing both pressure
 coefficient and velocity (but this is not currently available
 through PFLOW).
- 12 1 Include rotationality of inviscid velocity in COEFVS.
- 13 0 Ignore phi-velocity terms when computing streamwise
 velocity gradients as part of the computation of transverse
 pressure gradients in the Poisson pressure equation.
 1 Include the phi-velocity terms.
- 14 Maximum pseudo-time step size used in ADI for solution of the
 Poisson pressure equation is divided by the factor $2^{**}ICOEF(5,14)$.
- 15 Minimum pseudo-time step size used in ADI for solution of the
 Poisson pressure equation is divided by the factor $2^{**}ICOEF(5,15)$.

- 16 <0 Print iteration data in ADI during solution of energy equation every [ICOEF(5,16)] iterations.
 0 Print iteration data every iteration.
 1 Same as 0, plus print of namelists TRMDMP, DTADI2, and DUMP in subroutine ADI.
 2 Same as 1, plus print of coefficients of input equations (first iteration only).
 3 Same as 2, plus print of coefficients of equations sent to matrix inverter each sweep, and resulting solution.
 4 Same as 3, plus print from matrix inverter.
 5 Same as 1.
- 17 <0 Print iteration data in ADI during solution of swirl equation every [ICOEF(5,17)] iterations.
 0 Print iteration data every iteration.
 1 Same as 0, plus print of namelists TRMDMP, DTADI2, and DUMP in subroutine ADI.
 2 Same as 1, plus print of coefficients of input equations (first iteration only).
 3 Same as 2, plus print of coefficients of equations sent to matrix inverter each sweep, and resulting solution.
 4 Same as 3, plus print from matrix inverter.
 5 Same as 1.
- 18 Not used.
- 19 1 Update streamwise velocity and turbulent viscosity coefficient when using KSTART = 1 option.
- 20 Not used.

ICOEF(6,n)

None of these options are currently being used.

PEPSIG (CORNER VORTEX VERSION)
"Z" ARRAY PRINTOUT AVAILABLE
WITH KPRT OPTION

This table lists the variables that may be printed and/or written into the plot file using the KPRT and KPLT arrays. Variable numbers 1 through 70 are stored in the Z array. Those above 70 are additional variables that may be printed and/or written into the plot file. In this table, "n" refers to the upstream station, and "n+1" refers to the station most recently computed.

No.	VARIABLE	MNEMONIC NAME	DESCRIPTION
1	u	NUN	Streamwise velocity at n
2	u	NU	Streamwise velocity at n+1
3	v	NVN	Velocity at n in relative Cartesian y-direction
4	v	NV	Velocity at n+1 in relative Cartesian y-direction
5	w	NWN	Velocity at n in relative Cartesian z-direction
6	w	NW	Velocity at n+1 in relative Cartesian z-direction
7	ρ	NRHON	Static density at n
8	ρ	NRHO	Static density at n+1
9	Ω	NVORN	Streamwise vorticity at n
10	Ω	NVOR	Streamwise vorticity at n+1
11	c_p	NCPIN	Inviscid pressure coefficient at n
12	c_p	NCPI	Inviscid pressure coefficient at n+1
13	μ	MUN	Laminar viscosity coefficient at n
14	μ	MU	Laminar viscosity coefficient at n+1
15	μ_t	MUTN	Turbulent viscosity coefficient at n
16	μ_t	MUT	Turbulent viscosity coefficient at n+1
17	p	NPRESN	Static pressure at n from Poisson pressure equation

18	p	NPRES	Static pressure at n+1 from Poisson pressure equation
19	v	NVPHN	Scalar potential velocity in relative Cartesian y-direction at n
20	v	NVPH	Scalar potential velocity in relative Cartesian y-direction at n+1
21	w	NWPHN	Scalar potential velocity in relative Cartesian z-direction at n
22	w	NWPH	Scalar potential velocity in relative Cartesian z-direction at n+1
23	y	NXYZA	Reference Cartesian coordinate in y-direction
24	z	NXYZA+1	Reference Cartesian coordinate in z-direction
27	x	NXYZA+1	Reference Cartesian coordinate in x-direction
26-34		NEI11+	Elements of Jacobian matrix at n+1
35-43		NEN11+	Elements of Jacobian matrix at n
44	2D:D	NDD	Dissipation function
45	h	NHN	Orthogonal metric scale factor at n
46	h	NH	Orthogonal metric scale factor at n+1
47	v_i	NVIN	Inviscid velocity at n in relative Cartesian y-direction
48	v_i	NVI	Inviscid velocity at n+1 in relative Cartesian y-direction
49	w_i	NWIN	Inviscid velocity at n in relative Cartesian z-direction
50	w_i	NWI	Inviscid velocity at n+1 in relative Cartesian z-direction
51		NPX1	y-component of the transverse pressure gradient
52		NPX2	z-component of the transverse pressure gradient
53		NRAD1	x-component of the distance vector to the center of rotation

54		NRAD2	y-component of the distance vector to the center of rotation
55		NRAD3	z-component of the distance vector to the center of rotation
56	v	NVPSN	Vector potential velocity in relative Cartesian y-direction at n
57	v	NVPS	Vector potential velocity in relative Cartesian y-direction at n+1
58	w	NWPSN	Vector potential velocity in relative Cartesian z-direction at n
59	w	NWPS	Vector potential velocity in relative Cartesian z-direction at n+1
60	u_i	NUIN	Inviscid streamwise velocity at n
61	u_i	NUI	Inviscid streamwise velocity at n+1
62	l	NLEN	Turbulence mixing length
63	ψ	NPSI	Secondary flow stream function
64	ϕ	NPHI	Secondary flow scalar potential
65	T	NTEMN	Static temperature at n
66	T	NTEM	Static temperature at n+1
67	E^0	NEON	Total enthalpy at n
68	E^0	NEO	Total enthalpy at n+1
69		NDPIDX	Inviscid streamwise pressure gradient
70			
71	M n	NLOCMA	Mach number
72	P	NDSTPR	Static pressure
73	P_t	NDTOPR	Total pressure
74	ρ	NDRHO	Static density
75	c_p	NDCP	Static pressure coefficient
76	T_t	NDTOTM	Total temperature

PEPSIG (CORNER VORTEX VERSION) PARAMETERS

In PEP SIG, the sizes of the dimensioned arrays, and hence the storage required for the program, are set using PARAMETERS. These PARAMETERS themselves are set in COMDECK CPARAM. Larger or smaller dimensions can be set for the entire program simply by changing the appropriate PARAMETERS in COMDECK CPARAM, and then recompiling the program. The basic PARAMETERS are defined as follows:

NDYP - Maximum number of grid points in the circumferential direction for the viscous flow calculation. Currently set equal to 55.

NDZP - Maximum number of grid points in the radial direction for the viscous flow calculation. Currently set equal to 50.

NDXPA - Maximum number of grid points in the streamwise direction for the potential flow calculation. Currently set equal to 50.

NDYPA - Maximum number of grid points in the circumferential direction for the potential flow calculation. Currently set equal to 20.

NDZPA - Maximum number of grid points in the radial direction for the potential flow calculation. Currently set equal to 20.

MVARP - Total number of variables stored in the Z array. Currently set equal to 70.

Several additional PARAMETERS are defined in COMDECK CPARAM as functions of those listed above. The following PARAMETERS are used in various common blocks, DIMENSION statements, and EQUIVALENCE statements:

NDP	=	Maximum of NDYP, NDZP, NDYPA, and NDZPA.
NDYNDZ	=	NDYP*NDZP.
NDP2	=	NDP**2
NDPM2	=	NDP - 2
NDZP1	=	NDZP + 1
NDPA NDZPA.	=	Maximum of NDYP, NDZP, NDXPA, NDYPA, NDZPA.
NPFA	=	18*NDXPA*NDYPA*NDZPA

$$\begin{aligned} \text{NPF} &= 18 \cdot \text{NDXPA} \cdot \text{NDYPA} \cdot \text{NDZPA} - 15 \cdot \text{NDYP} \cdot \text{NDZP} \\ &\quad - 35 \cdot \text{NDYP} \cdot \text{NDZP} - 18 \cdot \text{NDP}^2 \\ &\quad - \text{MVARP} \cdot \text{NDYP} \cdot \text{NDZP} \end{aligned}$$

The PARAMETER NPF may require some explanation. The total amount of storage required in the C array (common block BLKMM) for the potential flow calculation is $18 \cdot \text{NDXPA} \cdot \text{NDYPA} \cdot \text{NDZPA}$. However, the total amount required in common block BLKMM for the viscous calculation is only $15 \cdot \text{NDYP} \cdot \text{NDZP}$ (for array C), plus $35 \cdot \text{NDYP} \cdot \text{NDZP} + 18 \cdot \text{NDP}^2$ (for array CQVQ1), plus $\text{MVARP} \cdot \text{NDYP} \cdot \text{NDZP}$ (for array Z). The array CPFLOW(NPF) is therefore added to common block BLKMM to make it large enough for the potential flow calculation. If BLKMM is already large enough, NPF is equal to 1.

In addition to the above PARAMETERS, the following are used in the BLOCK DATA routine:

NDC	= $15 \cdot \text{NDYP} \cdot \text{NDZP}$
NZV	= $\text{MVARP} \cdot \text{NDYP} \cdot \text{NDZP}$
MVARP1	= $\text{MVARP} + 1$
MVARP2	= $\text{MVARP} + 2$
MVARP3	= $\text{MVARP} + 3$
MVARP4	= $\text{MVARP} + 4$
MVARP5	= $\text{MVARP} + 5$
MVARP6	= $\text{MVARP} + 6$
MVARP7	= $\text{MVARP} + 7$
MVARP8	= $\text{MVARP} + 8$
MVARP9	= $\text{MVARP} + 9$
MVAR4	= $\text{MVARP} - 4$
MVAR69	= $\text{MVARP} - 69$
NDANG	= $4 \cdot \text{NDYPA}$
NDRAD	= $4 \cdot \text{NDZPA}$
NDCPI	= $4 \cdot \text{NDYPA} \cdot \text{NDZPA}$

RUNNING A CASE WITH PEPSIG
(CORNER VORTEX VERSION)

This input runstream is stored as [LEVY.VOR]VOR.JOB.

```
JOB, JN=VOR, MFL=900000, T=200, US=DEFER.
ACCOUNT, AC=28X162X8, US=LEVY, UPW=PEPSIG.
COPYD.
REWIND, DN=$IN.
ACCESS, DN=OBJECT, PDN=PGB*VOR, ID=SRA.
ACCESS, DN=UTIL, PDN=LIB*UTILB, ID=SRA, OWN=DEJONG.
LDR, DN=OBJECT, LIB=UTIL, NA.
EXIT.
/EOF
1 FLOW WITH VORTEX
  &RESTR
  &END
  &FLUIDS
  NS1=1, NS2=-1, NS3=1, NS4=-2,
  BLD=.004, 0., .02, 0.,
  VGEN(1, 20)=0.004, 0.000, 0.,
  VGEN(1, 19)=0.010, 0.085, 0.,
  REY=1.E6, KTURB=1, IBULEV=0,
  IPLOT=1, AP=1.07,
  NEY=49, NEZ=49,
  T=0.038, DTE=.00811,
  NS=33,
  ICOEF(1, 1)=0, ICOEF(1, 6)=1, ICOEF(2, 1)=500,
  ICOEF(1, 2)=0, ICOEF(1, 5)=10,
  ICOEF(1, 12)=-20, ICOEF(1, 13)=-20, ICOEF(1, 14)=-20,
  ICOEF(2, 3)=-1000, ICOEF(2, 5)=-1000,
  ICOEF(2, 16)=40, ICOEF(2, 17)=40,
  ICOEF(5, 2)=-1,
  IWSTA=5, 12, 33,
  IPSTA=5, 12, 33,
  ISKPL=1, JSKPL=1, NY1PL=1, NZ1PL=1, NY2PL=45, NZ2PL=44,
  ISKPR=1, JSKPR=1, NY1PR=1, NZ1PR=1, NY2PR=45, NZ2PR=44,
  &END
  &GEOM
  IDUCT=0,
  VIS=.004, .9434, .002, 1.,
  NGEOM=21,
  PGEOD=1000*0.,
  PGEOD(1, 1)=.2, PGEOD(1, 2)=.116,
  &END
  &VORTEX
  ZZERO=(.023, .0077),
  QTEDGE=0.35,
  RCORE=0.0023,
  &END
  STOP
/EOF
```

RUNNING A CASE WITH PEPSIG (CORNER VORTEX VERSION)

```

1 FLOW WITH VORTEX
&RESTR1
&END
&FLUIDS
NS1=1,NS2=-1,NS3=1,NS4=-2,
BLD=.004,0.,.02,0.,
VGEN(1,20)=0.004,0.000,0.,
VGEN(1,19)=0.010,0.085,0.,
REY=1.E6,KTURB=1,IBULEV=0,
IPLOT=1,AP=1.07,
NEY=49,NEZ=49,
T=0.038,DTE=.00811,
NS=33,
ICOE(1,1)=0,ICOE(1,6)=1,ICOE(2,1)=500,
ICOE(1,2)=0,ICOE(1,5)=10,
ICOE(1,12)=-20,ICOE(1,13)=-20,ICOE(1,14)=-20,
ICOE(2,3)=-1000,ICOE(2,5)=-1000,
ICOE(2,16)=40,ICOE(2,17)=40,
ICOE(5,2)=-1,
IWSTA=5,12,33,
IPSTA=5,12,33,
ISKPL=1,JSKPL=1,NY1PL=1,NZ1PL=1, NY2PL=45,NZ2PL=44,
ISKPR=1,JSKPR=1,NY1PR=1,NZ1PR=1, NY2PR=45,NZ2PR=44,
&END
&GEOM
IDUCT=0,
VIS=.004,.9434,.002,1.,
NGEOM=21,
PGED=1000*0.,
PGEOD(1,1)=.2,PGEOD(1,2)=.116,
&END
&VORTEX
ZZERO=(.023,.0077),
QTEDGE=0.35,
RCORE=0.0023,
&END
STOP

```

```

$PARAM KVARP = 70, KVARP1 = 71, KVARP2 = 72, KVARP3 = 73, KVARP4 = 74, KVARP5 = 75, KVARP6 = 76, KVARP7 = 77,
KVARP8 = 78, KVARP9 = 79, KVAR4 = 66, KVAR69 = 0, MDANG = 80, MDCPI = 1600, MDCQ = 150700, MDCQZ1 = 384451, MDP = 55,
MDPA = 55, MDPM2 = 53, MDP0 = 55, MDP1 = 20, MDP2 = 3025, MDP3 = 50, MDRAD = 80, MDXP = 0, MDXPA = 50, MDYNDZ = 2750,
MDYP = 55, MDYPA = 20, MDZP = 50, MDZPA = 20, MPF = 1, MPFA = 360000, MPF1 = 384451, MZV = 192500, $END

```

```

$GEOM ALPH0 = 0., ARC = 0., ARCO = 0., EPSK = 48*1., IDUCT = 0, IPA = 2, IPB = 2, ITUBE = 0, NCTRK = 4*0, NGFOM = 21,
PCLD = 23*0., 1., 306*0., PGEOD = 0.2, 10*0., 0.116, 1528*0., RFRAME = 3*0., ROTAX = 2*0., 1., 6*0., RTUE = 1.E-2,
TFRAME = 2*0., 1., TSECT = 10*10000000000., VFRAME = 1., 2*0., VIS = 4.E-3, 0.9434, 2.E-3, 1., XAK = 48*0.,
XFRAME = 0., $END

```

```

$RESTR INCORE = 1, IRSTIN = 0,IRSTOT = 34, JRSTIN = 11, JRSTOT = 11, NFILE = 0, NSAVED = 0, $END

```

```

$FLUIDS ABQ = -0.1428571428571, ABT = 7143., ALPHA = 0., AP = 1.07, 9*1., BLD = 4.E-3, 0., 2.E-2, 3*0., CMACH = 1.E-2,
CP = 6006., CPR = 6006., DELBUL = 0.2, DTE = 8.11E-3, 9*1.E-2, DXSTRT = -0.1, ESTR = 2*0., EZERO = 25000.5,
FLRFC = 2.5E-2, IADDPL = 55*0, IADDP2 = 55*0, IBETA = 1, IBULFV = 0, ICOEF = 0, 500, 8*0, -1, 0, 200, -1000, 4*0,
200, 5*0, 10, -1000, 2*0, 1, 0, 1, 7*0, 1, 24*0, -1, 2*0, -20, 2*0, 1, 2*0, -20, 5*0, -20, 12*0, 4*0, 5*0,
40, 0, 3, 5*0, 5, 1, 4*0, 6, 5*0, 7, 2*0, IERG = 0, IGEN = 30*0, ILAW = 2, IMX = 0, INPOPT = 1, IOVER = 0,
IPFN = 50*0, IPFX = 0, IPLOT = 1, IPNLMX = 0, IPRD = 0, IPSR = 0, IPSTA = 5, 12, 33, 997*0, IROT = 0, ISBR = 0,
ISEQ = 0, ISKPL = 1, ISKPR = 1, ISWRL = 0, ISYM = 2, IUNITS = 1, IVT = 0, IWSTA = 5, 12, 33, 997*0, IYPNLI = 10*0,
IYPNL2 = 10*0, IZPNLI = 10*0, IZPNL2 = 10*0, JADDPL = 50*0, JSKPL = 1, JSKPR = 1, JXPNI1 = 10*0,
JXPNI2 = 10*0, KADDPL = 5, 12, 33, 997*0, KADDP2 = 5, 12, 33, 997*0, KGREAD = 1, KPLT = 25, 24, 23, 2, 6, 4, 75,
12, 69, 4, 6, 2, 10, 63, 104*0, KPRT = 15*0, KSECT = 1, KSKPL = 999, KSKPR = 999, KSTART = 0, KTRSF = 3*0, 3*3,
112*0, KTURB = 1, NEY = 49, NEZ = 49, NGEN = 0, NLOBE = 0, NPLT = 14, NS = 33, NSTART = 1, NSEL = 0, NSE2 = 0,
NSE3 = 0, NSE4 = 0, NS1 = 1, NS2 = -1, NS3 = 1, NS4 = -2, NX1PL = 0, NX1PR = 0, NX2PL = 33, NX2PR = 33, NY1PL = 1,
NY1PR = 1, NY2PL = 45, NY2PR = 45, NZ1PL = 1, NZ1PR = 1, NZ2PL = 44, NZ2PR = 44, PRL = 0.72, PRT = 0.9, PSIA = 0.,
PZERO = 1., QRATIO = 1., REY = 100000., RG = 1716., ROSBYI = 0., RZERO = 5.8275058275058E-4, SOUND = 49.01428363243,
T = 3.8E-2, TZERO = 1., USTR = 2*1., UZERO = 0.4901428363242, VGEN = 360*0., 1.E-2, 8.5E-2, 18*0., 4.E-3, 219*0.,
VISCOS = 4.901428363242E-7, VPEN = 50*0., VPFX = 0., VSTR = 2*0., VSWRL = 2*0., YLOBE = 110*0., YZERO = 1., $END

```

ICOE(I,J)

I / J	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1 /	0	0	200	200	10	1	0	0	0	0	0	-20	-20	-20	0	0	0	0	0	0
2 /	500	0-1000	0-1000	0-1000	0	0	0	0	0	0	0	0	0	0	0	40	40	0	0	0
3 /	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
4 /	0	0	0	0	0	0	0	0	0	0	-1	1	0	0	0	0	3	5	6	7
5 /	0	-1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
6 /	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

INPOPT = 1

YZERO = 0.10000E+01 /YZERO UZERO = 0.49014E+00 /UZERO
 SOUND = 0.49014E+02 /UZERO TZERO = 0.10000E+01 /TZERO
 PZERO = 0.10000E+01 /RZ/UZSQ RZERO = 0.58275E-03 /RZERO
 CMACH = 0.10000E-01 REY = 0.10000E+07
 VISCOS= 0.49014E-06 /RZ/VISC

FRAME	1	0.0380	0.0000	0.0000	
WIDTH, HEIGHT, DEL Y, DEL Z: 1 0.20000E+00 0.11600E+00 0.00000E+00 0.00000E+00					
FRAME	2	0.0461	0.0000	0.0000	
WIDTH, HEIGHT, DEL Y, DEL Z: 2 0.20000E+00 0.11600E+00 0.00000E+00 0.00000E+00					
FRAME	1	0.0380	0.0000	0.0000	
WIDTH, HEIGHT, DEL Y, DEL Z: 1 0.20000E+00 0.11600E+00 0.00000E+00 0.00000E+00					
AVORTEX ZZERO = (2.3E-2, 7.7E-3), RCORE = 2.3E-3, CTEDGE = 0.35, END					

INTEGRATED PROPERTIES AT STATION 1

AREA	0.46393E-01/YZEROSQ
MASS FLUX	0.45000E-01*UZ/R/YS
REYNOLDS NUMBER BASED ON LOCAL	
MEAN VELOCITY AND DIAMETER	0.23574E+06
MASS AVG. TOTAL PRESSURE COEFF/2	0.48120E+00
MASS AVG. TOTAL PRESSURE COEFF/2	0.48120E+00
WITHOUT VISCOS CORRECTION	-0.12474E-10
MASS AVG. STATIC PRESSURE COEFF/2	-0.12474E-10
MASS AVG. STATIC PRESSURE COEFF/2	0.97855E-02
WITHOUT VISCOS CORRECTION	0.96997E+00
MASS AVG. MACH NUMBER	
AVERAGE VELOCITY/UZERO	

STARTING PROCEDURE

FRAME	2	0.0461	0.0000	0.0000	
WIDTH, HEIGHT, DEL Y, DEL Z: 2 0.20000E+00 0.11600E+00 0.00000E+00 0.00000E+00					

```

ADI ** ITER  PMAX      DELP      RHSMAX      PTEST      RHS TEST      LOG RES
20 0.12130E-03 0.11494E-07 0.22313E-05 0.94759E+00 0.10303E+02 1.67
40 0.13537E-03 0.69910E-08 0.22328E-05 0.51644E+00 0.62619E+01 1.47
60 0.14320E-03 0.39101E-08 0.22337E-05 0.27306E+03 0.35010E+01 1.21
80 0.14788E-03 0.21520E-08 0.22342E-05 0.14552E+00 0.19264E+01 0.95
100 0.15157E-03 0.11826E-08 0.22345E-05 0.78019E-01 0.10585E+01 0.69
105 0.15275E-03 0.10181E-08 0.22345E-05 0.66653E-01 0.91130E+00 0.63

```

```

ITER  RHO      LOG RES-F      DPF      PXF      LOG RES-S      DPS      PXS      TF      TS      ICONV
20 0.9731E+03 3.44      0.2569E+00 0.1110E+04 1.74      0.7722E-07 0.1425E-02 0.1187E+01 0.1678E+02 0
38 0.3119E+02 2.94      0.1747E+01 0.1117E+04 0.28      0.2701E-08 0.1427E-02 0.3786E+00 0.5773E+00 5
FRAME 1      0.0380      0.0000      0.0000

```

```

WIDTH, HEIGHT, DEL Y, DEL Z: 1 0.20000E+00 0.11600E+00 0.00000E+00 0.00000E+00

```

END STARTING PROCEDURE

1

1-TH STATION AT 0.38000E-01

```

CENTERLINE LOCATION ( 0.00000E+00 , 0.00000E+00 , 0.38000E-01 ) /YZERO STEP SIZE 0.75794E-02
CENTERLINE ARC LENGTH= 0.38000E-01/YZERO

```

```

STATION 1 ***** Y-REF /YZERO *****
IZ 1 3 5 7 9 11 13 15 17 19
IY 1 0.0000E+00 0.0000E+00 0.0000E+00 0.0000E+00 0.0000E+00 0.0000E+00 0.0000E+00 0.0000E+00 0.0000E+00
3 0.9940E-04 0.9940E-04 0.9940E-04 0.9940E-04 0.9940E-04 0.9940E-04 0.9940E-04 0.9940E-04 0.9940E-04
5 0.2475E-03 0.2475E-03 0.2475E-03 0.2475E-03 0.2475E-03 0.2475E-03 0.2475E-03 0.2475E-03 0.2475E-03
7 0.4674E-03 0.4674E-03 0.4674E-03 0.4674E-03 0.4674E-03 0.4674E-03 0.4674E-03 0.4674E-03 0.4674E-03
9 0.7922E-03 0.7922E-03 0.7922E-03 0.7922E-03 0.7922E-03 0.7922E-03 0.7922E-03 0.7922E-03 0.7922E-03
11 0.1269E-02 0.1269E-02 0.1269E-02 0.1269E-02 0.1269E-02 0.1269E-02 0.1269E-02 0.1269E-02 0.1269E-02
13 0.1961E-02 0.1961E-02 0.1961E-02 0.1961E-02 0.1961E-02 0.1961E-02 0.1961E-02 0.1961E-02 0.1961E-02
15 0.2955E-02 0.2955E-02 0.2955E-02 0.2955E-02 0.2955E-02 0.2955E-02 0.2955E-02 0.2955E-02 0.2955E-02
17 0.4365E-02 0.4365E-02 0.4365E-02 0.4365E-02 0.4365E-02 0.4365E-02 0.4365E-02 0.4365E-02 0.4365E-02
19 0.6334E-02 0.6334E-02 0.6334E-02 0.6334E-02 0.6334E-02 0.6334E-02 0.6334E-02 0.6334E-02 0.6334E-02
21 0.9039E-02 0.9039E-02 0.9039E-02 0.9039E-02 0.9039E-02 0.9039E-02 0.9039E-02 0.9039E-02 0.9039E-02
23 0.1269E-01 0.1269E-01 0.1269E-01 0.1269E-01 0.1269E-01 0.1269E-01 0.1269E-01 0.1269E-01 0.1269E-01
25 0.1751E-01 0.1751E-01 0.1751E-01 0.1751E-01 0.1751E-01 0.1751E-01 0.1751E-01 0.1751E-01 0.1751E-01
27 0.2376E-01 0.2376E-01 0.2376E-01 0.2376E-01 0.2376E-01 0.2376E-01 0.2376E-01 0.2376E-01 0.2376E-01
29 0.3166E-01 0.3166E-01 0.3166E-01 0.3166E-01 0.3166E-01 0.3166E-01 0.3166E-01 0.3166E-01 0.3166E-01

```

SAMPLE OUTPUT

[illegible]

12	21	23	25	27	29	31	33	35	37	39
12	21	23	25	27	29	31	33	35	37	39

[illegible]

17. 41 43

[illegible]

25 0.1751E-01 0.1751E-01
 27 0.2376E-01 0.2376E-01
 29 0.3166E-01 0.3166E-01
 31 0.4143E-01 0.4143E-01
 33 0.5320E-01 0.5320E-01
 35 0.6703E-01 0.6703E-01
 37 0.8284E-01 0.8284E-01
 39 0.1004E+00 0.1004E+00
 41 0.1195E+00 0.1195E+00
 43 0.1395E+00 0.1395E+00
 45 0.1599E+00 0.1599E+00

STATION	1	3	5	7	9	11	13	15	17	19
IY	1	3	5	7	9	11	13	15	17	19
1	0.0000E+00	0.3593E-04	0.8990E-04	0.1708E-03	0.2915E-03	0.4704E-03	0.7336E-03	0.1117E-02	0.1670E-02	0.2457E-02
3	0.0000E+00	0.3593E-04	0.8990E-04	0.1708E-03	0.2915E-03	0.4704E-03	0.7336E-03	0.1117E-02	0.1670E-02	0.2457E-02
5	0.0000E+00	0.3593E-04	0.8990E-04	0.1708E-03	0.2915E-03	0.4704E-03	0.7336E-03	0.1117E-02	0.1670E-02	0.2457E-02
7	0.0000E+00	0.3593E-04	0.8990E-04	0.1708E-03	0.2915E-03	0.4704E-03	0.7336E-03	0.1117E-02	0.1670E-02	0.2457E-02
9	0.0000E+00	0.3593E-04	0.8990E-04	0.1708E-03	0.2915E-03	0.4704E-03	0.7336E-03	0.1117E-02	0.1670E-02	0.2457E-02
11	0.0000E+00	0.3593E-04	0.8990E-04	0.1708E-03	0.2915E-03	0.4704E-03	0.7336E-03	0.1117E-02	0.1670E-02	0.2457E-02
13	0.0000E+00	0.3593E-04	0.8990E-04	0.1708E-03	0.2915E-03	0.4704E-03	0.7336E-03	0.1117E-02	0.1670E-02	0.2457E-02
15	0.0000E+00	0.3593E-04	0.8990E-04	0.1708E-03	0.2915E-03	0.4704E-03	0.7336E-03	0.1117E-02	0.1670E-02	0.2457E-02
17	0.0000E+00	0.3593E-04	0.8990E-04	0.1708E-03	0.2915E-03	0.4704E-03	0.7336E-03	0.1117E-02	0.1670E-02	0.2457E-02
19	0.0000E+00	0.3593E-04	0.8990E-04	0.1708E-03	0.2915E-03	0.4704E-03	0.7336E-03	0.1117E-02	0.1670E-02	0.2457E-02
21	0.0000E+00	0.3593E-04	0.8990E-04	0.1708E-03	0.2915E-03	0.4704E-03	0.7336E-03	0.1117E-02	0.1670E-02	0.2457E-02
23	0.0000E+00	0.3593E-04	0.8990E-04	0.1708E-03	0.2915E-03	0.4704E-03	0.7336E-03	0.1117E-02	0.1670E-02	0.2457E-02
25	0.0000E+00	0.3593E-04	0.8990E-04	0.1708E-03	0.2915E-03	0.4704E-03	0.7336E-03	0.1117E-02	0.1670E-02	0.2457E-02
27	0.0000E+00	0.3593E-04	0.8990E-04	0.1708E-03	0.2915E-03	0.4704E-03	0.7336E-03	0.1117E-02	0.1670E-02	0.2457E-02
29	0.0000E+00	0.3593E-04	0.8990E-04	0.1708E-03	0.2915E-03	0.4704E-03	0.7336E-03	0.1117E-02	0.1670E-02	0.2457E-02
31	0.0000E+00	0.3593E-04	0.8990E-04	0.1708E-03	0.2915E-03	0.4704E-03	0.7336E-03	0.1117E-02	0.1670E-02	0.2457E-02
33	0.0000E+00	0.3593E-04	0.8990E-04	0.1708E-03	0.2915E-03	0.4704E-03	0.7336E-03	0.1117E-02	0.1670E-02	0.2457E-02
35	0.0000E+00	0.3593E-04	0.8990E-04	0.1708E-03	0.2915E-03	0.4704E-03	0.7336E-03	0.1117E-02	0.1670E-02	0.2457E-02
37	0.0000E+00	0.3593E-04	0.8990E-04	0.1708E-03	0.2915E-03	0.4704E-03	0.7336E-03	0.1117E-02	0.1670E-02	0.2457E-02
39	0.0000E+00	0.3593E-04	0.8990E-04	0.1708E-03	0.2915E-03	0.4704E-03	0.7336E-03	0.1117E-02	0.1670E-02	0.2457E-02
41	0.0000E+00	0.3593E-04	0.8990E-04	0.1708E-03	0.2915E-03	0.4704E-03	0.7336E-03	0.1117E-02	0.1670E-02	0.2457E-02
43	0.0000E+00	0.3593E-04	0.8990E-04	0.1708E-03	0.2915E-03	0.4704E-03	0.7336E-03	0.1117E-02	0.1670E-02	0.2457E-02
45	0.0000E+00	0.3593E-04	0.8990E-04	0.1708E-03	0.2915E-03	0.4704E-03	0.7336E-03	0.1117E-02	0.1670E-02	0.2457E-02

STATION	1	3	5	7	9	11	13	15	17	19
IY	1	3	5	7	9 <td>11</td> <td>13</td> <td>15</td> <td>17</td> <td>19</td>	11	13	15	17	19
1	0.3560E-02	0.5085E-02	0.7155E-02	0.9915E-02	0.1352E-01	0.1815E-01	0.2394E-01	0.3104E-01	0.3954E-01	0.4946E-01
3	0.3560E-02	0.5085E-02	0.7155E-02	0.9915E-02	0.1352E-01	0.1815E-01	0.2394E-01	0.3104E-01	0.3954E-01	0.4946E-01
5	0.3560E-02	0.5085E-02	0.7155E-02	0.9915E-02	0.1352E-01	0.1815E-01	0.2394E-01	0.3104E-01	0.3954E-01	0.4946E-01
7	0.3560E-02	0.5085E-02	0.7155E-02	0.9915E-02	0.1352E-01	0.1815E-01	0.2394E-01	0.3104E-01	0.3954E-01	0.4946E-01
9	0.3560E-02	0.5085E-02	0.7155E-02	0.9915E-02	0.1352E-01	0.1815E-01	0.2394E-01	0.3104E-01	0.3954E-01	0.4946E-01

IZ	41	43								
1.	0.3560E-02	0.5085E-02	0.7155E-02	0.9915E-02	0.1352E-01	0.1815E-01	0.2394E-01	0.3104E-01	0.3954E-01	0.4946E-01
13	0.3560E-02	0.5085E-02	0.7155E-02	0.9915E-02	0.1352E-01	0.1815E-01	0.2394E-01	0.3104E-01	0.3954E-01	0.4946E-01
15	0.3560E-02	0.5085E-02	0.7155E-02	0.9915E-02	0.1352E-01	0.1815E-01	0.2394E-01	0.3104E-01	0.3954E-01	0.4946E-01
17	0.3560E-02	0.5085E-02	0.7155E-02	0.9915E-02	0.1352E-01	0.1815E-01	0.2394E-01	0.3104E-01	0.3954E-01	0.4946E-01
19	0.3560E-02	0.5085E-02	0.7155E-02	0.9915E-02	0.1352E-01	0.1815E-01	0.2394E-01	0.3104E-01	0.3954E-01	0.4946E-01
21	0.3560E-02	0.5085E-02	0.7155E-02	0.9915E-02	0.1352E-01	0.1815E-01	0.2394E-01	0.3104E-01	0.3954E-01	0.4946E-01
23	0.3560E-02	0.5085E-02	0.7155E-02	0.9915E-02	0.1352E-01	0.1815E-01	0.2394E-01	0.3104E-01	0.3954E-01	0.4946E-01
25	0.3560E-02	0.5085E-02	0.7155E-02	0.9915E-02	0.1352E-01	0.1815E-01	0.2394E-01	0.3104E-01	0.3954E-01	0.4946E-01
27	0.3560E-02	0.5085E-02	0.7155E-02	0.9915E-02	0.1352E-01	0.1815E-01	0.2394E-01	0.3104E-01	0.3954E-01	0.4946E-01
29	0.3560E-02	0.5085E-02	0.7155E-02	0.9915E-02	0.1352E-01	0.1815E-01	0.2394E-01	0.3104E-01	0.3954E-01	0.4946E-01
31	0.3560E-02	0.5085E-02	0.7155E-02	0.9915E-02	0.1352E-01	0.1815E-01	0.2394E-01	0.3104E-01	0.3954E-01	0.4946E-01
33	0.3560E-02	0.5085E-02	0.7155E-02	0.9915E-02	0.1352E-01	0.1815E-01	0.2394E-01	0.3104E-01	0.3954E-01	0.4946E-01
35	0.3560E-02	0.5085E-02	0.7155E-02	0.9915E-02	0.1352E-01	0.1815E-01	0.2394E-01	0.3104E-01	0.3954E-01	0.4946E-01
37	0.3560E-02	0.5085E-02	0.7155E-02	0.9915E-02	0.1352E-01	0.1815E-01	0.2394E-01	0.3104E-01	0.3954E-01	0.4946E-01
39	0.3560E-02	0.5085E-02	0.7155E-02	0.9915E-02	0.1352E-01	0.1815E-01	0.2394E-01	0.3104E-01	0.3954E-01	0.4946E-01
41	0.3560E-02	0.5085E-02	0.7155E-02	0.9915E-02	0.1352E-01	0.1815E-01	0.2394E-01	0.3104E-01	0.3954E-01	0.4946E-01
43	0.3560E-02	0.5085E-02	0.7155E-02	0.9915E-02	0.1352E-01	0.1815E-01	0.2394E-01	0.3104E-01	0.3954E-01	0.4946E-01
45	0.3560E-02	0.5085E-02	0.7155E-02	0.9915E-02	0.1352E-01	0.1815E-01	0.2394E-01	0.3104E-01	0.3954E-01	0.4946E-01

IZ	41	43
1	0.6077E-01	0.7334E-01
3	0.6077E-01	0.7334E-01
5	0.6077E-01	0.7334E-01
7	0.6077E-01	0.7334E-01
9	0.6077E-01	0.7334E-01
11	0.6077E-01	0.7334E-01
13	0.6077E-01	0.7334E-01
15	0.6077E-01	0.7334E-01
17	0.6077E-01	0.7334E-01
19	0.6077E-01	0.7334E-01
21	0.6077E-01	0.7334E-01
23	0.6077E-01	0.7334E-01
25	0.6077E-01	0.7334E-01
27	0.6077E-01	0.7334E-01
29	0.6077E-01	0.7334E-01
31	0.6077E-01	0.7334E-01
33	0.6077E-01	0.7334E-01
35	0.6077E-01	0.7334E-01
37	0.6077E-01	0.7334E-01
39	0.6077E-01	0.7334E-01
41	0.6077E-01	0.7334E-01
43	0.6077E-01	0.7334E-01
45	0.6077E-01	0.7334E-01

VELOCITY VECTOR DISPLAYED IN COMPUTATIONAL COORDINATES

NAVY USERS MANUAL

STATION		1	****			VEL-S			/UZERO			****					
IZ	1	3	5	7	9	11	13	15	17	19							
IY																	
1	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	
3	0.0000E+00	0.3804E-01	0.1018E+00	0.1835E+00	0.2546E+00	0.3025E+00	0.3309E+00	0.3467E+00	0.3553E+00	0.3601E+00	0.3636E+00	0.3662E+00	0.3682E+00	0.3700E+00	0.3718E+00	0.3736E+00	
5	0.0000E+00	0.3913E-01	0.1148E+00	0.2337E+00	0.3580E+00	0.4504E+00	0.5056E+00	0.5357E+00	0.5520E+00	0.5603E+00	0.5668E+00	0.5725E+00	0.5775E+00	0.5821E+00	0.5861E+00	0.5896E+00	
7	0.0000E+00	0.3935E-01	0.1180E+00	0.2477E+00	0.3896E+00	0.4958E+00	0.5577E+00	0.5927E+00	0.6142E+00	0.6283E+00	0.6383E+00	0.6467E+00	0.6535E+00	0.6595E+00	0.6649E+00	0.6698E+00	
9	0.0000E+00	0.3939E-01	0.1190E+00	0.2527E+00	0.4013E+00	0.5124E+00	0.5770E+00	0.6171E+00	0.6467E+00	0.6690E+00	0.6790E+00	0.6858E+00	0.6915E+00	0.6962E+00	0.7001E+00	0.7035E+00	
11	0.0000E+00	0.3936E-01	0.1192E+00	0.2546E+00	0.4061E+00	0.5193E+00	0.5854E+00	0.6296E+00	0.6585E+00	0.6785E+00	0.6895E+00	0.6962E+00	0.7009E+00	0.7049E+00	0.7084E+00	0.7115E+00	
13	0.0000E+00	0.3929E-01	0.1192E+00	0.2551E+00	0.4079E+00	0.5222E+00	0.5892E+00	0.6356E+00	0.6658E+00	0.6858E+00	0.6970E+00	0.7037E+00	0.7075E+00	0.7107E+00	0.7134E+00	0.7157E+00	
15	0.0000E+00	0.3917E-01	0.1188E+00	0.2548E+00	0.4082E+00	0.5231E+00	0.5906E+00	0.6383E+00	0.6682E+00	0.6882E+00	0.6995E+00	0.7062E+00	0.7090E+00	0.7117E+00	0.7144E+00	0.7167E+00	
17	0.0000E+00	0.3900E-01	0.1183E+00	0.2540E+00	0.4075E+00	0.5229E+00	0.5907E+00	0.6392E+00	0.6692E+00	0.6892E+00	0.7005E+00	0.7072E+00	0.7099E+00	0.7126E+00	0.7153E+00	0.7176E+00	
19	0.0000E+00	0.3876E-01	0.1175E+00	0.2526E+00	0.4061E+00	0.5218E+00	0.5900E+00	0.6388E+00	0.6688E+00	0.6888E+00	0.6999E+00	0.7066E+00	0.7094E+00	0.7121E+00	0.7148E+00	0.7171E+00	
21	0.0000E+00	0.3845E-01	0.1165E+00	0.2507E+00	0.4039E+00	0.5200E+00	0.5885E+00	0.6375E+00	0.6675E+00	0.6875E+00	0.6986E+00	0.7053E+00	0.7080E+00	0.7107E+00	0.7134E+00	0.7157E+00	
23	0.0000E+00	0.3804E-01	0.1151E+00	0.2481E+00	0.4003E+00	0.5175E+00	0.5864E+00	0.6354E+00	0.6654E+00	0.6854E+00	0.6965E+00	0.7032E+00	0.7059E+00	0.7086E+00	0.7113E+00	0.7136E+00	
25	0.0000E+00	0.3754E-01	0.1134E+00	0.2449E+00	0.3971E+00	0.5142E+00	0.5835E+00	0.6325E+00	0.6625E+00	0.6825E+00	0.6936E+00	0.7003E+00	0.7030E+00	0.7057E+00	0.7084E+00	0.7107E+00	
27	0.0000E+00	0.3694E-01	0.1113E+00	0.2410E+00	0.3924E+00	0.5100E+00	0.5799E+00	0.6288E+00	0.6588E+00	0.6788E+00	0.6899E+00	0.6966E+00	0.7013E+00	0.7050E+00	0.7087E+00	0.7119E+00	
29	0.0000E+00	0.3625E-01	0.1090E+00	0.2365E+00	0.3869E+00	0.5051E+00	0.5756E+00	0.6244E+00	0.6544E+00	0.6744E+00	0.6855E+00	0.6922E+00	0.6969E+00	0.7006E+00	0.7043E+00	0.7075E+00	
31	0.0000E+00	0.3549E-01	0.1064E+00	0.2315E+00	0.3807E+00	0.4995E+00	0.5706E+00	0.6194E+00	0.6448E+00	0.6641E+00	0.6799E+00	0.6918E+00	0.7001E+00	0.7075E+00	0.7138E+00	0.7199E+00	
33	0.0000E+00	0.3468E-01	0.1036E+00	0.2261E+00	0.3740E+00	0.4933E+00	0.5651E+00	0.6138E+00	0.6438E+00	0.6638E+00	0.6750E+00	0.6838E+00	0.6895E+00	0.6932E+00	0.6969E+00	0.6999E+00	
35	0.0000E+00	0.3386E-01	0.1009E+00	0.2206E+00	0.3669E+00	0.4867E+00	0.5593E+00	0.6079E+00	0.6379E+00	0.6581E+00	0.6694E+00	0.6776E+00	0.6833E+00	0.6870E+00	0.6897E+00	0.6924E+00	
37	0.0000E+00	0.3305E-01	0.9812E-01	0.2151E+00	0.3598E+00	0.4799E+00	0.5532E+00	0.6018E+00	0.6318E+00	0.6514E+00	0.6627E+00	0.6690E+00	0.6727E+00	0.6754E+00	0.6771E+00	0.6788E+00	
39	0.0000E+00	0.3228E-01	0.9552E-01	0.2099E+00	0.3529E+00	0.4732E+00	0.5472E+00	0.5957E+00	0.6381E+00	0.6572E+00	0.6685E+00	0.6748E+00	0.6785E+00	0.6812E+00	0.6830E+00	0.6847E+00	
41	0.0000E+00	0.3156E-01	0.9312E-01	0.2050E+00	0.3464E+00	0.4668E+00	0.5413E+00	0.5898E+00	0.6317E+00	0.6497E+00	0.6610E+00	0.6673E+00	0.6700E+00	0.6717E+00	0.6734E+00	0.6751E+00	
43	0.0000E+00	0.3092E-01	0.9095E-01	0.2006E+00	0.3404E+00	0.4607E+00	0.5358E+00	0.5842E+00	0.6257E+00	0.6437E+00	0.6550E+00	0.6613E+00	0.6640E+00	0.6657E+00	0.6674E+00	0.6691E+00	
45	0.0000E+00	0.3034E-01	0.8904E-01	0.1967E+00	0.3349E+00	0.4552E+00	0.5306E+00	0.5790E+00	0.6201E+00	0.6381E+00	0.6494E+00	0.6557E+00	0.6594E+00	0.6621E+00	0.6638E+00	0.6655E+00	
IZ	21	23	25	27	29	31	33	35	37	39							
IY																	
1	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	
3	0.3627E+00	0.3642E+00	0.3651E+00	0.3656E+00	0.3659E+00	0.3660E+00	0.3661E+00	0.3662E+00	0.3662E+00	0.3662E+00	0.3662E+00	0.3662E+00	0.3662E+00	0.3662E+00	0.3662E+00	0.3662E+00	
5	0.5659E+00	0.5687E+00	0.5703E+00	0.5712E+00	0.5719E+00	0.5721E+00	0.5723E+00	0.5723E+00	0.5723E+00	0.5723E+00	0.5723E+00	0.5723E+00	0.5723E+00	0.5723E+00	0.5723E+00	0.5723E+00	
7	0.6368E+00	0.6419E+00	0.6453E+00	0.6469E+00	0.6481E+00	0.6487E+00	0.6492E+00	0.6492E+00	0.6492E+00	0.6492E+00	0.6492E+00	0.6492E+00	0.6492E+00	0.6492E+00	0.6492E+00	0.6492E+00	
9	0.6850E+00	0.6958E+00	0.7027E+00	0.7070E+00	0.7097E+00	0.7114E+00	0.7124E+00	0.7131E+00	0.7135E+00	0.7138E+00	0.7138E+00	0.7138E+00	0.7138E+00	0.7138E+00	0.7138E+00	0.7138E+00	
11	0.7224E+00	0.7416E+00	0.7553E+00	0.7646E+00	0.7706E+00	0.7745E+00	0.7770E+00	0.7786E+00	0.7796E+00	0.7796E+00	0.7796E+00	0.7796E+00	0.7796E+00	0.7796E+00	0.7796E+00	0.7796E+00	
13	0.7495E+00	0.7795E+00	0.8035E+00	0.8215E+00	0.8341E+00	0.8427E+00	0.8483E+00	0.8520E+00	0.8545E+00	0.8545E+00	0.8545E+00	0.8545E+00	0.8545E+00	0.8545E+00	0.8545E+00	0.8545E+00	
15	0.7674E+00	0.8079E+00	0.8444E+00	0.8746E+00	0.8973E+00	0.9134E+00	0.9243E+00	0.9315E+00	0.9363E+00	0.9363E+00	0.9363E+00	0.9363E+00	0.9363E+00	0.9363E+00	0.9363E+00	0.9363E+00	
17	0.7778E+00	0.8268E+00	0.8749E+00	0.9173E+00	0.9502E+00	0.9725E+00	0.9863E+00	0.9944E+00	0.9991E+00	0.9991E+00	0.9991E+00	0.9991E+00	0.9991E+00	0.9991E+00	0.9991E+00	0.9991E+00	
19	0.7828E+00	0.8374E+00	0.8941E+00	0.9453E+00	0.9838E+00	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	
21	0.7839E+00	0.8417E+00	0.9039E+00	0.9615E+00	0.9996E+00	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	
23	0.7823E+00	0.8414E+00	0.9066E+00	0.9680E+00	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	
25	0.7786E+00	0.8378E+00	0.9042E+00	0.9683E+00	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	
27	0.7733E+00	0.8316E+00	0.8979E+00	0.9640E+00	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	
29	0.7666E+00	0.8235E+00	0.8886E+00	0.9559E+00	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	
31	0.7589E+00	0.8139E+00	0.8772E+00	0.9448E+00	0.9978E+00	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	
33	0.7505E+00	0.8035E+00	0.8643E+00	0.9311E+00	0.9892E+00	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	
35	0.7417E+00	0.7925E+00	0.8507E+00	0.9158E+00	0.9775E+00	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	

37	0.7329E+00	0.7816E+00	0.8369E+00	0.8997E+00	0.9631E+00	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01
39	0.7243E+00	0.7711E+00	0.8237E+00	0.8836E+00	0.9471E+00	0.9970E+00	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01
41	0.7161E+00	0.7612E+00	0.8113E+00	0.8684E+00	0.9306E+00	0.9858E+00	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01
43	0.7085E+00	0.7522E+00	0.8001E+00	0.8543E+00	0.9146E+00	0.9726E+00	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01
45	0.7016E+00	0.7441E+00	0.7900E+00	0.8418E+00	0.8999E+00	0.9587E+00	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01

IY	1Z	41	43
1	0.0000E+00	0.0000E+00	0.0000E+00
3	0.3663E+00	0.3663E+00	
5	0.5726E+00	0.5726E+00	
7	0.6498E+00	0.6498E+00	
9	0.7140E+00	0.7141E+00	
11	0.7807E+00	0.7810E+00	
13	0.8572E+00	0.8579E+00	
15	0.9417E+00	0.9432E+00	
17	0.1000E+01	0.1000E+01	
19	0.1000E+01	0.1000E+01	
21	0.1000E+01	0.1000E+01	
23	0.1000E+01	0.1000E+01	
25	0.1000E+01	0.1000E+01	
27	0.1000E+01	0.1000E+01	
29	0.1000E+01	0.1000E+01	
31	0.1000E+01	0.1000E+01	
33	0.1000E+01	0.1000E+01	
35	0.1000E+01	0.1000E+01	
37	0.1000E+01	0.1000E+01	
39	0.1000E+01	0.1000E+01	
41	0.1000E+01	0.1000E+01	
43	0.1000E+01	0.1000E+01	
45	0.1000E+01	0.1000E+01	

STATION		1	****				VEL-IY /UZERO				****			
IY	1Z	1	3	5	7	9	11	13	15	17	19			
1	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00			
3	0.0000E+00	0.9609E-04	0.3000E-03	0.5572E-03	0.7866E-03	0.9359E-03	0.9833E-03	0.9504E-03	0.8636E-03	0.7378E-03				
5	0.0000E+00	0.5364E-03	0.1217E-02	0.1953E-02	0.2572E-02	0.2910E-02	0.2965E-02	0.2833E-02	0.2519E-02	0.2031E-02				
7	0.0000E+00	0.9852E-03	0.2199E-02	0.3429E-02	0.4293E-02	0.4545E-02	0.4394E-02	0.4045E-02	0.3440E-02	0.2491E-02				
9	0.0000E+00	0.1303E-02	0.2924E-02	0.4553E-02	0.5587E-02	0.5800E-02	0.5542E-02	0.5077E-02	0.4260E-02	0.3058E-02				
11	0.0000E+00	0.1537E-02	0.3464E-02	0.5396E-02	0.6587E-02	0.6883E-02	0.6722E-02	0.6270E-02	0.5519E-02	0.4339E-02				
13	0.0000E+00	0.1780E-02	0.4014E-02	0.6258E-02	0.7644E-02	0.8076E-02	0.8086E-02	0.7838E-02	0.7285E-02	0.6328E-02				
15	0.0000E+00	0.2157E-02	0.4864E-02	0.7586E-02	0.9279E-02	0.9863E-02	0.1001E-01	0.9951E-02	0.9633E-02	0.8946E-02				
17	0.0000E+00	0.2791E-02	0.6288E-02	0.9815E-02	0.1202E-01	0.1280E-01	0.1305E-01	0.1310E-01	0.1293E-01	0.1243E-01				
19	0.0000E+00	0.3842E-02	0.8653E-02	0.1352E-01	0.1656E-01	0.1765E-01	0.1803E-01	0.1815E-01	0.1802E-01	0.1754E-01				
21	0.0000E+00	0.5697E-02	0.1283E-01	0.2007E-01	0.2461E-01	0.2623E-01	0.2680E-01	0.2699E-01	0.2682E-01	0.2612E-01				

	21	23	25	27	29	31	33	35	37	39
23	0.0000E+00	0.9483E-02	0.2136E-01	0.3346E-01	0.4108E-01	0.4380E-01	0.4474E-01	0.4503E-01	0.4467E-01	0.4332E-01
25	0.0000E+00	0.1891E-01	0.4262E-01	0.6688E-01	0.8223E-01	0.8771E-01	0.8965E-01	0.9035E-01	0.8982E-01	0.8738E-01
27	0.0000E+00	0.3858E-01	0.8695E-01	0.1366E+00	0.1682E+00	0.1799E+00	0.1852E+00	0.1900E+00	0.1968E+00	0.2088E+00
29	0.0000E+00	0.1505E-01	0.3397E-01	0.5347E-01	0.6588E-01	0.7029E-01	0.7184E-01	0.7237E-01	0.7187E-01	0.6978E-01
31	0.0000E+00	0.4797E-02	0.1084E-01	0.1707E-01	0.2105E-01	0.2246E-01	0.2298E-01	0.2320E-01	0.2315E-01	0.2277E-01
33	0.0000E+00	0.1908E-02	0.4320E-02	0.6807E-02	0.8398E-02	0.8966E-02	0.9176E-02	0.9284E-02	0.9316E-02	0.9269E-02
35	0.0000E+00	0.9192E-03	0.2086E-02	0.3293E-02	0.4068E-02	0.4344E-02	0.4446E-02	0.4502E-02	0.4527E-02	0.4526E-02
37	0.0000E+00	0.5017E-03	0.1141E-02	0.1806E-02	0.2235E-02	0.2387E-02	0.2473E-02	0.2473E-02	0.2489E-02	0.2494E-02
39	0.0000E+00	0.2919E-03	0.6656E-03	0.1056E-02	0.1309E-02	0.1398E-02	0.1431E-02	0.1448E-02	0.1457E-02	0.1461E-02
41	0.0000E+00	0.1702E-03	0.3887E-03	0.6180E-03	0.7676E-03	0.8201E-03	0.8386E-03	0.8486E-03	0.8538E-03	0.8567E-03
43	0.0000E+00	0.8841E-04	0.2022E-03	0.3221E-03	0.4008E-03	0.4283E-03	0.4377E-03	0.4426E-03	0.4453E-03	0.4471E-03
45	0.0000E+00	0.1933E-04	0.4396E-04	0.7034E-04	0.8794E-04	0.9403E-04	0.9587E-04	0.9668E-04	0.9734E-04	0.9871E-04

	21	23	25	27	29	31	33	35	37	39
1	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
3	0.5870E-03	0.4437E-03	0.3525E-03	0.3372E-03	0.3814E-03	0.4499E-03	0.5214E-03	0.5868E-03	0.6408E-03	0.6818E-03
5	0.1439E-02	0.8762E-03	0.4970E-03	0.3867E-03	0.5077E-03	0.7472E-03	0.1025E-02	0.1295E-02	0.1524E-02	0.1701E-02
7	0.1288E-02	0.6688E-04	- .8892E-03	- .1376E-02	- .1379E-02	- .1042E-02	- .5200E-03	0.5510E-04	0.5775E-03	0.9966E-03
9	0.1393E-02	- .4970E-03	- .2226E-02	- .3410E-02	- .3863E-02	- .3662E-02	- .3004E-02	- .2138E-02	- .1290E-02	- .5843E-03
11	0.2532E-02	0.1630E-03	- .2360E-02	- .4468E-02	- .5696E-02	- .5908E-02	- .5275E-02	- .4179E-02	- .3015E-02	- .2012E-02
13	0.4759E-02	0.2373E-02	- .6575E-03	- .3688E-02	- .5925E-02	- .6854E-02	- .6476E-02	- .5288E-02	- .3898E-02	- .2664E-02
15	0.7716E-02	0.5703E-02	0.2761E-02	- .7545E-03	- .3881E-02	- .5613E-02	- .5604E-02	- .4438E-02	- .2956E-02	- .1627E-02
17	0.1139E-01	0.9567E-02	0.6773E-02	0.3165E-02	- .4583E-03	- .2734E-02	- .2918E-02	- .1767E-02	- .3509E-03	0.8302E-03
19	0.1644E-01	0.1435E-01	0.1092E-01	0.6364E-02	0.1727E-02	- .1417E-02	- .2439E-02	- .1659E-02	- .2569E-03	0.9603E-03
21	0.2452E-01	0.2141E-01	0.1610E-01	0.8755E-02	0.1452E-02	- .3393E-02	- .4518E-02	- .3182E-02	- .1242E-02	0.3379E-03
23	0.4025E-01	0.3416E-01	0.2361E-01	0.9414E-02	- .2847E-02	- .8400E-02	- .8045E-02	- .5280E-02	- .2475E-02	- .4270E-03
25	0.8109E-01	0.6617E-01	0.3515E-01	- .3718E-02	- .2139E-01	- .2006E-01	- .1356E-01	- .7813E-02	- .3808E-02	- .1255E-02
27	0.2301E+00	0.2433E+00	0.5996E-01	- .1557E+00	- .8105E-01	- .3596E-01	- .1803E-01	- .9457E-02	- .4713E-02	- .1926E-02
29	0.6474E-01	0.5380E-01	0.3293E-01	0.6059E-02	- .1084E-01	- .1431E-01	- .1140E-01	- .7460E-02	- .4285E-02	- .2078E-02
31	0.2184E-01	0.1999E-01	0.1672E-01	0.1176E-01	0.5813E-02	0.7188E-03	- .2198E-02	- .2942E-02	- .2422E-02	- .1510E-02
33	0.9118E-02	0.8794E-02	0.8179E-02	0.7102E-02	0.5447E-02	0.3462E-02	0.1570E-02	0.1931E-03	- .4679E-03	- .5673E-03
35	0.4502E-02	0.4442E-02	0.4317E-02	0.4059E-02	0.3566E-02	0.2865E-02	0.2064E-02	0.1249E-02	0.5877E-03	0.1735E-03
37	0.2493E-02	0.2486E-02	0.2469E-02	0.2410E-02	0.2250E-02	0.1961E-02	0.1645E-02	0.1257E-02	0.8533E-03	0.4962E-03
39	0.1465E-02	0.1470E-02	0.1478E-02	0.1475E-02	0.1423E-02	0.1286E-02	0.1145E-02	0.9667E-03	0.7509E-03	0.5201E-03
41	0.8602E-03	0.8674E-03	0.8809E-03	0.8951E-03	0.8858E-03	0.8792E-03	0.7374E-03	0.6559E-03	0.5469E-03	0.4151E-03
43	0.4502E-03	0.4573E-03	0.4714E-03	0.4909E-03	0.5007E-03	0.4751E-03	0.4263E-03	0.3953E-03	0.3487E-03	0.2840E-03
45	0.1024E-03	0.1111E-03	0.1284E-03	0.1560E-03	0.1859E-03	0.1988E-03	0.1822E-03	0.1939E-03	0.1942E-03	0.1769E-03

	41	43
1	0.0000E+00	0.0000E+00
3	0.7119E-03	0.7337E-03
5	0.1832E-02	0.1928E-02
7	0.1315E-02	0.1550E-02
9	- .3709E-04	0.3739E-03
11	- .1222E-02	- .6241E-03
13	- .1689E-02	- .9559E-03
15	- .6119E-03	0.1140E-03

		***** VEL-JZ /UZERO *****																		
		STATION		1	3	5	7	9	11	13	15	17	19							
IZ	1																			
IY																				
17	0.1652E-02	0.2167E-02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	
19	0.1787E-02	0.2274E-02	0.0000E+00	-0.1925E-03	-0.3348E-03	-0.4286E-03	-0.4172E-03	-0.3360E-03	-0.2823E-03	-0.3557E-03	-0.6327E-03	-0.1248E-02								
21	0.1370E-02	0.1952E-02	0.0000E+00	-0.1809E-03	-0.3770E-03	-0.5567E-03	-0.6041E-03	-0.5435E-03	-0.4867E-03	-0.6124E-03	-0.1052E-02	-0.2010E-02								
23	0.8498E-03	0.1543E-02	0.0000E+00	-0.1374E-03	-0.3231E-03	-0.5272E-03	-0.6769E-03	-0.7500E-03	-0.7133E-03	-0.8648E-03	-0.1374E-02	-0.2407E-02								
25	0.2591E-03	0.1058E-02	0.0000E+00	-0.1110E-03	-0.3245E-03	-0.6300E-03	-0.9778E-03	-0.1206E-02	-0.1196E-02	-0.1311E-02	-0.1855E-02	-0.2917E-02								
27	-0.3046E-03	0.5470E-03	0.0000E+00	-0.1040E-03	-0.3668E-03	-0.8205E-03	-0.1418E-02	-0.1847E-02	-0.1926E-02	-0.2036E-02	-0.2597E-02	-0.3726E-02								
29	-0.6738E-03	0.1006E-03	0.0000E+00	-0.1047E-03	-0.4066E-03	-0.9772E-03	-0.1781E-02	-0.2674E-02	-0.2674E-02	-0.2900E-02	-0.3540E-02	-0.4785E-02								
31	-0.6950E-03	-0.1728E-03	0.0000E+00	-0.1058E-03	-0.4279E-03	-0.1063E-02	-0.1992E-02	-0.2801E-02	-0.3246E-02	-0.3685E-02	-0.4532E-02	-0.5977E-02								
33	-0.4004E-03	-0.2241E-03	0.0000E+00	-0.1054E-03	-0.4381E-03	-0.1110E-02	-0.2119E-02	-0.3052E-02	-0.3672E-02	-0.4348E-02	-0.5493E-02	-0.7278E-02								
35	-0.2513E-04	-0.1194E-03	0.0000E+00	-0.1055E-03	-0.4496E-03	-0.1160E-02	-0.2251E-02	-0.3315E-02	-0.4123E-02	-0.5072E-02	-0.6606E-02	-0.8912E-02								
37	0.2210E-03	0.1541E-04	0.0000E+00	-0.1079E-03	-0.4734E-03	-0.1249E-02	-0.2475E-02	-0.3755E-02	-0.4876E-02	-0.6280E-02	-0.8473E-02	-0.1170E-01								
39	0.2987E-03	0.9901E-04	0.0000E+00	-0.1164E-03	-0.5328E-03	-0.1453E-02	-0.2980E-02	-0.4749E-02	-0.6590E-02	-0.9047E-02	-0.1277E-01	-0.1814E-01								
41	0.2700E-03	0.1218E-03	0.0000E+00	-0.1386E-03	-0.6759E-03	-0.1933E-02	-0.4157E-02	-0.7076E-02	-0.1065E-01	-0.1569E-01	-0.2327E-01	-0.3448E-01								
43	0.2027E-03	0.1093E-03	0.0000E+00	-0.8875E-04	-0.3709E-03	-0.9372E-03	-0.1741E-02	-0.2267E-02	-0.2142E-02	-0.1653E-02	-0.1119E-02	-0.5240E-03								
45	0.0000E+00	-0.5750E-04	0.0000E+00	-0.1806E-03	-0.3179E-03	-0.2358E-03	0.7419E-03	0.3208E-02	0.7191E-02	0.1279E-01	0.2056E-01	0.2630E-02								
	0.0000E+00	-0.8353E-04	0.0000E+00	-0.3465E-03	-0.3465E-03	-0.8736E-03	-0.1597E-02	-0.1944E-02	-0.1453E-02	-0.3732E-03	0.9828E-03	0.2630E-02								
	0.0000E+00	-0.8937E-04	0.0000E+00	-0.3868E-03	-0.3868E-03	-0.1016E-02	-0.1954E-02	-0.2637E-02	-0.2607E-02	-0.2172E-02	-0.1744E-02	-0.1393E-02								
	0.0000E+00	-0.9045E-04	0.0000E+00	-0.3975E-03	-0.3975E-03	-0.1061E-02	-0.2073E-02	-0.2861E-02	-0.2939E-02	-0.2627E-02	-0.2377E-02	-0.2886E-02								
	0.0000E+00	-0.9050E-04	0.0000E+00	-0.4014E-03	-0.1083E-02	-0.2139E-02	-0.2982E-02	-0.3094E-02	-0.3094E-02	-0.2794E-02	-0.2563E-02	-0.2507E-02								
	0.0000E+00	-0.9023E-04	0.0000E+00	-0.4031E-03	-0.1098E-02	-0.2187E-02	-0.3070E-02	-0.3197E-02	-0.3197E-02	-0.2893E-02	-0.2631E-02	-0.2535E-02								
	0.0000E+00	-0.8985E-04	0.0000E+00	-0.4039E-03	-0.1109E-02	-0.2224E-02	-0.3141E-02	-0.3279E-02	-0.3279E-02	-0.2945E-02	-0.2663E-02	-0.2534E-02								
	0.0000E+00	-0.8940E-04	0.0000E+00	-0.4039E-03	-0.1116E-02	-0.2254E-02	-0.3199E-02	-0.3345E-02	-0.3345E-02	-0.2992E-02	-0.2681E-02	-0.2538E-02								
	0.0000E+00	-0.8891E-04	0.0000E+00	-0.4035E-03	-0.1121E-02	-0.2277E-02	-0.3246E-02	-0.3399E-02	-0.3399E-02	-0.3027E-02	-0.2687E-02	-0.2511E-02								
IZ	21	23	25	27	29	31	33	35	37	39										
IY																				
1	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	

3	-2397E-02	-4198E-02	-6532E-02	-8913E-02	-1055E-01	-1067E-01	-9160E-02	-6779E-02	-4470E-02	-2658E-02
5	-3769E-02	-6498E-02	-1004E-01	-1373E-01	-1633E-01	-1658E-01	-1427E-01	-1058E-01	-6984E-02	-4156E-02
7	-4261E-02	-7137E-02	-1091E-01	-1489E-01	-1776E-01	-1810E-01	-1563E-01	-1162E-01	-7684E-02	-4580E-02
9	-4730E-02	-7527E-02	-1122E-01	-1516E-01	-1803E-01	-1836E-01	-1585E-01	-1179E-01	-7800E-02	-4650E-02
11	-5524E-02	-8194E-02	-1171E-01	-1548E-01	-1822E-01	-1847E-01	-1591E-01	-1182E-01	-7812E-02	-4653E-02
13	-6693E-02	-9317E-02	-1261E-01	-1608E-01	-1854E-01	-1858E-01	-1590E-01	-1176E-01	-7759E-02	-4611E-02
15	-8099E-02	-1087E-01	-1408E-01	-1719E-01	-1917E-01	-1878E-01	-1584E-01	-1162E-01	-7633E-02	-4518E-02
17	-9743E-02	-1280E-01	-1609E-01	-1894E-01	-2029E-01	-1917E-01	-1574E-01	-1139E-01	-7428E-02	-4375E-02
19	-1200E-01	-1561E-01	-1915E-01	-2171E-01	-2215E-01	-1983E-01	-1567E-01	-1108E-01	-7162E-02	-4208E-02
21	-1599E-01	-2089E-01	-2523E-01	-2728E-01	-2580E-01	-2134E-01	-1561E-01	-1053E-01	-6689E-02	-3914E-02
23	-2526E-01	-3342E-01	-4003E-01	-4043E-01	-3319E-01	-2327E-01	-1490E-01	-9361E-02	-5822E-02	-3404E-02
25	-5048E-01	-7141E-01	-8856E-01	-7525E-01	-4314E-01	-2190E-01	-1159E-01	-6851E-02	-4303E-02	-2572E-02
27	0.3891E-03	0.2091E-02	0.4229E-02	0.3365E-02	0.5967E-03	-1.389E-02	-2.117E-02	-2229E-02	-1.938E-02	-1.349E-02
29	0.3123E-01	0.4498E-01	0.5716E-01	0.5295E-01	0.3478E-01	0.1799E-01	0.7941E-02	0.2965E-02	0.8151E-03	0.1242E-03
31	0.4705E-02	0.7330E-02	0.1051E-01	0.1368E-01	0.1502E-01	0.1254E-01	0.8570E-02	0.5019E-02	0.2625E-02	0.1358E-02
33	-1.033E-02	-4.962E-03	0.5601E-03	0.2507E-02	0.4909E-02	0.5656E-02	0.5121E-02	0.4022E-02	0.2810E-02	0.1864E-02
35	-2284E-02	-2242E-02	-1.872E-02	-7.613E-03	0.1064E-02	0.2268E-02	0.2469E-02	0.2389E-02	0.2076E-02	0.1678E-02
37	-2560E-02	-2.618E-02	-2.472E-02	-1.788E-02	-4.339E-03	0.7892E-03	0.1081E-02	0.1229E-02	0.1264E-02	0.1200E-02
39	-2584E-02	-2.631E-02	-2.546E-02	-2.2084E-02	-1.086E-02	0.6699E-04	0.4196E-03	0.5704E-03	0.6835E-03	0.7436E-03
41	-2541E-02	-2.545E-02	-2.460E-02	-2.116E-02	-1.365E-02	-3.567E-03	0.1046E-03	0.2226E-03	0.3307E-03	0.4151E-03
43	-2481E-02	-2.435E-02	-2.323E-02	-2.2036E-02	-1.456E-02	-6.280E-03	-4.780E-04	0.5472E-04	0.1417E-03	0.2164E-03
45	-2412E-02	-2.315E-02	-2.163E-02	-1.891E-02	-1.417E-02	-7.349E-03	-1.197E-03	0.1346E-04	0.7293E-04	0.1228E-03

IY	IZ	41	43
1	1	0.0000E+00	0.0000E+00
3	3	-1.318E-02	-2.772E-03
5	5	-2.062E-02	-4.344E-03
7	7	-2.276E-02	-4.813E-03
9	9	-2.311E-02	-4.876E-03
11	11	-2.308E-02	-4.795E-03
13	13	-2.276E-02	-4.547E-03
15	15	-2.212E-02	-4.111E-03
17	17	-2.124E-02	-3.594E-03
19	19	-2.031E-02	-3.130E-03
21	21	-1.871E-02	-2.388E-03
23	23	-1.605E-02	-1.214E-03
25	25	-1.183E-02	0.5703E-04
27	27	-5.725E-03	0.3099E-03
29	29	0.1832E-03	0.6261E-03
31	31	0.9016E-03	0.9429E-03
33	33	0.1326E-02	0.1149E-02
35	35	0.1347E-02	0.1157E-02
37	37	0.1089E-02	0.9844E-03
39	39	0.7531E-03	0.7274E-03
41	41	0.4663E-03	0.4818E-03
43	43	0.2698E-03	0.2962E-03
45	45	0.1591E-03	0.1780E-03

STATION	1	3	5	7	VOR-X	*Y2/U2	****	11	13	15	17	19
IY	1	3	5	7								
1	-9061E-08	-5582E+01	-6094E+01	-5838E+01	-4946E+01	-3858E+01	-3356E+01	-4450E+01	-8159E+01	-1639E+02		
3	-1859E+01	-3700E+01	-4906E+01	-4910E+01	-3883E+01	-2574E+01	-1859E+01	-2312E+01	-4312E+01	-8691E+01		
5	-1566E+02	-1343E+02	-1051E+02	-6970E+01	-3604E+01	-1567E+01	-7262E+00	-6797E+00	-1132E+01	-2082E+01		
7	-2923E+02	-2489E+02	-1885E+02	-1134E+02	-4352E+01	-1029E+01	-3801E+00	-1628E+00	-1598E+00	-2327E+00		
9	-3840E+02	-3312E+02	-2542E+02	-1496E+02	-4930E+01	-1037E+01	-2820E+00	-9699E+00	-4833E+01	-5317E+01		
11	-4493E+02	-3903E+02	-3022E+02	-1741E+02	-5205E+01	-1076E+01	-3141E+00	-1070E+00	-3565E+01	-2755E+01		
13	-5163E+02	-4500E+02	-3497E+02	-1993E+02	-5728E+01	-1192E+01	-3630E+00	-1273E+00	-3625E+01	-1447E+01		
15	-6233E+02	-5437E+02	-4232E+02	-2406E+02	-6838E+01	-1425E+01	-4393E+00	-1561E+00	-4344E+01	-1091E+01		
17	-8051E+02	-7028E+02	-5477E+02	-3116E+02	-8819E+01	-1834E+01	-5655E+00	-2011E+00	-5606E+01	-1262E+01		
19	-1108E+03	-9682E+02	-7555E+02	-4305E+02	-1216E+02	-2522E+01	-7786E+00	-2774E+00	-7781E+01	-1759E+01		
21	-1644E+03	-1438E+03	-1124E+03	-6418E+02	-1811E+02	-3747E+01	-1160E+01	-4152E+00	-1173E+00	-2695E+01		
23	-2739E+03	-2399E+03	-1879E+03	-1076E+03	-3036E+02	-6261E+01	-1946E+01	-7006E+00	-1978E+00	-4308E+01		
25	-5472E+03	-4798E+03	-3766E+03	-2165E+03	-6104E+02	-1252E+02	-3890E+01	-1374E+01	-3211E+00	0.7092E-01		
27	-1117E+04	-9798E+03	-7700E+03	-4436E+03	-1243E+03	-2487E+02	-7152E+01	-1436E+01	0.1975E+01	0.6217E+01		
29	-4347E+03	-3819E+03	-3011E+03	-1748E+03	-4942E+02	-1006E+02	-3172E+01	-1159E+01	-3055E+00	-1403E+01		
31	-1378E+03	-1211E+03	-9563E+02	-5581E+02	-1583E+02	-3209E+01	-1020E+01	-3813E+00	-1095E+00	-2547E+01		
33	-5454E+02	-4795E+02	-3795E+02	-2228E+02	-6345E+01	-1279E+01	-4088E+00	-1544E+00	-4422E+01	-1010E+01		
35	-2629E+02	-2313E+02	-1836E+02	-1085E+02	-3102E+01	-6217E+00	-1999E+00	-7648E+01	-2197E+01	-4997E+02		
37	-1440E+02	-1269E+02	-1010E+02	-6010E+01	-1725E+01	-3437E+00	-1111E+00	-4312E+01	-1246E+01	-2845E+02		
39	-8405E+01	-7416E+01	-5921E+01	-3548E+01	-1022E+01	-2027E+00	-6583E+01	-2590E+01	-7529E+02	-1728E+02		
41	-4909E+01	-4337E+01	-3472E+01	-2094E+01	-6059E+00	-1195E+00	-3898E+01	-1553E+01	-4542E+02	-1046E+02		
43	-2552E+01	-2258E+01	-1812E+01	-1099E+01	-3195E+00	-6276E+01	-2053E+01	-8277E+02	-2435E+02	-5641E+03		
45	-5577E+00	-4954E+00	-3996E+00	-2437E+00	-7078E+01	-1382E+01	-4532E+02	-1854E+02	-5553E+03	-1342E+03		
IY	21	23	25	27	29	31	33	35	37	39		
1	-3157E+02	-5491E+02	-8535E+02	-1177E+03	-1408E+03	-1428E+03	-1228E+03	-9100E+02	-6008E+02	-3574E+02		
3	-1667E+02	-2878E+02	-4438E+02	-6108E+02	-7306E+02	-7376E+02	-6319E+02	-4671E+02	-3077E+02	-1828E+02		
5	-3701E+01	-6123E+01	-9392E+01	-1321E+02	-1642E+02	-1724E+02	-1523E+02	-1150E+02	-7692E+01	-4618E+01		
7	-3591E+00	-5516E+00	-8260E+00	-1172E+01	-1502E+01	-1651E+01	-1524E+01	-1197E+01	-8262E+00	-5089E+00		
9	-7377E+01	-1050E+00	-1485E+00	-2019E+00	-2509E+00	-2701E+00	-2460E+00	-1916E+00	-1318E+00	-8101E+01		
11	-7372E+01	-5101E+01	-6733E+01	-8510E+01	-9857E+01	-9949E+01	-8561E+01	-6354E+01	-4193E+01	-2493E+01		
13	-1798E+01	-2725E+01	-3554E+01	-4204E+01	-4464E+01	-4103E+01	-3221E+01	-2194E+01	-1340E+01	-7428E+02		
15	-5841E+02	-9762E+02	-1541E+01	-1884E+01	-1904E+01	-603E+01	-1131E+01	-6878E+02	-3755E+02	-1864E+02		
17	-2692E+02	-1780E+02	-3341E+02	-5162E+02	-5614E+02	-4574E+02	-3068E+02	-1760E+02	-8507E+03	-3612E+03		
19	-3093E+02	-4371E+03	-2478E+03	-5187E+03	-6333E+03	-5145E+03	-1856E+03	-3929E+04	-3354E+05	-1802E+05		
21	-4744E+02	-2534E+03	0.4456E-03	0.6255E-04	-1894E+03	-1978E+05	-6192E-07	-1674E-07	-2792E+08	-1081E+08		
23	-1806E+02	0.1164E-01	0.1705E-01	0.6912E-02	-9090E-03	-1709E+05	-4969E-10	-2224E-11	-3372E-12	-1231E-12		
25	0.3395E+00	0.7935E+00	0.1285E+01	0.5058E+00	0.5213E+02	-1807E+04	-5642E+09	-4511E+14	-9053E+17	-3196E+17		
27	0.1865E+02	0.7664E+02	0.2224E+03	0.4849E+02	0.8402E+00	-8486E+04	-5419E+08	-5655E+13	-1919E+18	-2375E+22		
29	0.1261E+00	0.3054E+00	0.4793E+00	0.1953E+00	0.4050E+02	-1941E+04	-6349E+09	-5099E+14	-1452E+19	-1814E+25		
31	-4523E+02	-2324E+03	0.4819E+03	0.2158E+03	-8818E+04	-1558E+05	-3686E+10	-2457E+15	-6149E+21	-6962E+27		
33	-1722E+02	-1363E+03	0.5004E+04	0.3388E+04	0.1206E+04	0.4416E+06	0.7944E+11	0.4630E+16	0.1068E+21	0.1144E+27		

[illegible]

SAMPLE OUTPUT

[illegible]

	I2	41	43
IY			
1	0.0000E+00	0.0000E+00	
3	0.0000E+00	0.0000E+00	
5	0.0000E+00	0.0000E+00	
7	0.0000E+00	0.0000E+00	
9	0.0000E+00	0.0000E+00	
11	0.0000E+00	0.0000E+00	
13	0.0000E+00	0.0000E+00	


```

15 0.0000E+00 0.0000E+00
17 0.0000E+00 0.0000E+00
19 0.0000E+00 0.0000E+00
21 0.0000E+00 0.0000E+00
23 0.0000E+00 0.0000E+00
25 0.0000E+00 0.0000E+00
27 0.0000E+00 0.0000E+00
29 0.0000E+00 0.0000E+00
31 0.0000E+00 0.0000E+00
33 0.0000E+00 0.0000E+00
35 0.0000E+00 0.0000E+00
37 0.0000E+00 0.0000E+00
39 0.0000E+00 0.0000E+00
41 0.0000E+00 0.0000E+00
43 0.0000E+00 0.0000E+00
45 0.0000E+00 0.0000E+00

```

PLOT FILE WRITTEN FOR STATION JX= 1

```

FRAME      2      0.0461      0.0000      0.0000
WIDTH,HEIGHT,DEL Y,DEL Z:  2  0.20000E+00  0.11600E+00  0.00000E+00
ADI ** ITER  PMAX  DPLP  PTEST  RHSMAX  RHS TEST  LOG RES
20 0.20005E-03 0.31962E-07 0.43452E-05 0.15977E+01 0.14711E+02  2.15
40 0.21964E-03 0.19526E-07 0.43347E-05 0.88902E+00 0.90091E+01  1.91
60 0.26099E-03 0.10821E-07 0.43290E-05 0.41460E+00 0.49991E+01  1.65
80 0.28469E-03 0.59499E-08 0.43259E-05 0.20907E+00 0.27508E+01  1.39
100 0.29756E-03 0.32694E-08 0.43242E-05 0.10987E+00 0.15121E+01  1.13
120 0.30469E-03 0.17963E-08 0.43233E-05 0.58956E-01 0.83101E+00  0.87

```

```

ITER  RHO  LOG RES-F  DPF  PXF  LOG RES-S  DPS  PXS  TF  TS  iCONV
20 0.9731E+03  3.21  0.9488E+00 0.1528E+04  1.46  0.6281E-07 0.1221E-02  0.4126E+00 0.7396E+01  1
34 0.1742E+03  3.19  0.2186E+01 0.1528E+04  0.51  0.4572E-08 0.1221E-02  0.3968E+00 0.8324E+00  5
ADI ** ITER  PMAX  DPLP  PTEST  RHSMAX  RHS TEST  LOG RES
20 0.18451E-01 0.47884E-05 0.30344E-02 0.25952E+01 0.31561E+01  3.16
25 0.18688E-01 0.10423E-05 0.30371E-02 0.55776E+00 0.68639E+00  2.95
PRESSURE EQUATION CONVERGES

```

INTEGRATED PROPERTIES AT STATION 2

AREA

0.46393E-01/YZEROSQ

MASS FLUX
 MASS AVG. TOTAL PRESSURE COEFF/2 0.45004E-01*UZ/R/YS
 MASS AVG. TOTAL PRESSURE COEFF/2 0.48098E+00
 WITHOUT VISCIOUS CORRECTION
 MASS AVG. STATIC PRESSURE COEFF/2 0.48098E+00
 MASS AVG. STATIC PRESSURE COEFF/2 0.24946E-09
 WITHOUT VISCIOUS CORRECTION
 MASS AVG. MACH NUMBER 0.24946E-09
 AVERAGE VELOCITY/UZERO 0.97835E-02
 0.97006E+00

FRAME 3 0.0548 0.0000 0.0000

WIDTH, HEIGHT, DEL Y, DEL Z: 3 0.20000E+00 0.11600E+00 0.00000E+00 0.00000E+00
 ADI ** ITER PMAX DPLP RSMAX PTEST RHS TEST LOG RES
 20 0.23587E-03 0.11995E-07 0.31385E-05 0.50855E+00 0.76439E+01 1.72
 40 0.20649E-03 0.72228E-08 0.31429E-05 0.34979E+00 0.45962E+01 1.48
 60 0.19061E-03 0.39952E-08 0.31449E-05 0.20967E+00 0.25407E+01 1.22
 80 0.18189E-03 0.21965E-08 0.31460E-05 0.12075E+00 0.13963E+01 0.96
 95 0.17805E-03 0.14018E-08 0.31465E-05 0.78731E-01 0.89102E+00 0.77

ITER RHO LOG RES-F DPF PXF LOG RES-S DPS PXS TF TS ICONV
 20 0.9731E+03 3.15 0.8736E+00 0.8960E+03 1.29 0.3586E-07 0.1060E-02 0.7135E+00 0.8845E+01 1
 40 0.9731E+03 2.62 0.2689E+00 0.8960E+03 0.42 0.2130E-09 0.1060E-02 0.2104E+00 0.1177E+01 1
 43 0.3119E+02 3.12 0.1435E+01 0.8960E+03 0.20 0.1136E-08 0.1060E-02 0.6700E+00 0.7159E+00 5
 ADI ** ITER PMAX DPLP RSMAX PTEST RHS TEST LOG RES
 20 0.12692E-01 0.20097E-05 0.18160E-02 0.15834E+01 0.22133E+01 2.45
 25 0.12711E-01 0.51150E-06 0.18153E-02 0.40240E+00 0.56354E+00 2.48

PRESSURE EQUATION CONVERGES

INTEGRATED PROPERTIES AT STATION 3

AREA
 MASS FLUX
 MASS AVG. TOTAL PRESSURE COEFF/2 0.46393E-01/YZEROSQ
 MASS AVG. TOTAL PRESSURE COEFF/2 0.45004E-01*UZ/R/YS
 WITHOUT VISCIOUS CORRECTION 0.48076E+00
 MASS AVG. STATIC PRESSURE COEFF/2 0.48076E+00
 MASS AVG. STATIC PRESSURE COEFF/2 -0.99785E-10
 WITHOUT VISCIOUS CORRECTION -0.99785E-10
 MASS AVG. MACH NUMBER 0.97815E-02
 AVERAGE VELOCITY/UZERO 0.97007E+00

FRAME 4 0.0641 0.0000 0.0000

WIDTH, HEIGHT, DEL Y, DEL Z: 4 0.20000E+00 0.11600E+00 0.00000E+00 0.00000E+00
 ADI ** ITER PMAX DPLP RSMAX PTEST RHS TEST LOG RES

```

20 0.10177E-03 0.18322E-07 0.28101E-05 0.18003E+01 0.13040E+02 1.91
40 0.12328E-03 0.11691E-07 0.28186E-05 0.94827E+00 0.82953E+01 1.69
60 0.14152E-03 0.65309E-08 0.28220E-05 0.46150E+00 0.46286E+01 1.43
80 0.15165E-03 0.35938E-08 0.28238E-05 0.23699E+00 0.25454E+01 1.17
100 0.15721E-03 0.19749E-08 0.28248E-05 0.12562E+00 0.13982E+01 0.91
115 0.15966E-03 0.12603E-08 0.28252E-05 0.78936E-01 0.89220E+00 0.72

```

ITER	RHO	LOG RES-F	DPF	PXF	LOG RES-S	DPS	PXS	TF	TS	ICONV
20	0.9731E+03	2.70	0.9917E-01	0.5769E+03	1.05	0.2118E-07	0.9543E-03	0.7185E+00	0.1332E+02	1
40	0.9731E+03	1.85	0.3148E-01	0.5787E+03	0.04	0.8235E-10	0.9544E-03	0.1019E+00	0.1294E+01	1
43	0.3119E+02	2.39	0.4621E+00	0.5795E+03	-0.09	0.6381E-09	0.9544E-03	0.3565E+00	0.9519E+00	5

ADI ** ITER PMAX DELP RLSMAX PTEST RHS TEST LOG RES

```

20 0.90635E-02 0.99794E-06 0.12691E-02 0.11010E+01 0.15726E+01 1.96
25 0.90267E-02 0.23244E-06 0.12688E-02 0.25751E+00 0.36640E+00 1.31

```

PRESSURE EQUATION CONVERGES

INTEGRATED PROPERTIES AT STATION 4

```

AREA
MASS FLUX
MASS AVG. TOTAL PRESSURE COEFF/2
MASS AVG. TOTAL PRESSURE COEFF/2
WITHOUT VISCOS CORRECTION
MASS AVG. STATIC PRESSURE COEFF/2
MASS AVG. STATIC PRESSURE COEFF/2
WITHOUT VISCOS CORRECTION
MASS AVG. MACH NUMBER
AVERAGE VELOCITY/UZERO

```

0.46393E-01/YZEROSQ
0.44998E-01*UZ/R/YS
0.48053E+00
0.48053E+00
0.27856E-09
0.27856E-09
0.97793E-02
0.96993E+00

```

FRAME 5 0.0740 0.0000 0.0000
WIDTH, HEIGHT, DEL Y, DEL Z: 5 0.20000E+00 0.11600E+00 0.00000E+00
ADI ** ITER PMAX DELP RLSMAX PTEST RHS TEST LOG RES
20 0.23980E-03 0.12641E-07 0.26237E-05 0.52714E+00 0.96360E+01 1.74
40 0.26451E-03 0.81366E-08 0.26298E-05 0.30761E+00 0.61881E+01 1.53
60 0.27702E-03 0.45535E-08 0.26321E-05 0.16437E+00 0.34600E+01 1.28
80 0.28415E-03 0.25061E-08 0.26334E-05 0.88196E-01 0.19034E+01 1.02
100 0.28806E-03 0.13772E-08 0.26341E-05 0.47808E-01 0.10457E+01 0.76
105 0.28873E-03 0.11857E-08 0.26342E-05 0.41066E-01 0.90024E+00 0.69

```

ITER	RHO	LOG RES-F	DPF	PXF	LOG RES-S	DPS	PXS	TF	TS	ICONV
20	0.9731E+03	2.59	0.8983E-01	0.5909E+03	0.79	0.1326E-07	0.8740E-03	0.1027E+01	0.1826E+02	0

```

40 0.9731E+03 1.77 0.2391E-01 0.5924E+03 -0.03 0.7103E-10 0.8741E-03 0.1561E+00 0.2733E+01 1
52 0.5585E+01 2.19 0.2489E+00 0.5929E+03 -0.67 0.1594E-08 0.8741E-03 0.4026E+00 0.6278E+00 5
ADI ** ITER PMAX DFLP RHSMAX PTEST RHS TEST LOG RES
20 0.72526E-02 0.63404E-06 0.93372E-03 0.87423E+00 0.13581E+01 1.95
25 0.72229E-02 0.13035E-06 0.93355E-03 0.18047E+00 0.27925E+00 1.48

```

PRESSURE EQUATION CONVERGES

PLOT FILE WRITTEN FOR STATION JX= 5

INTEGRATED PROPERTIES AT STATION 5

```

AREA 0.46393E-01/YZEROSQ
MASS FLUX 0.44986E-01*UZ/R/YS
MASS AVG. TOTAL PRESSURE COEFF/2 0.48028E+00
MASS AVG. TOTAL PRESSURE COEFF/2 0.48028E+00
WITHOUT VISCOUS CORRECTION 0.19125E-09
MASS AVG. STATIC PRESSURE COEFF/2 0.19125E-09
MASS AVG. STATIC PRESSURE COEFF/2 0.19125E-09
WITHOUT VISCOUS CORRECTION 0.97767E-02
MASS AVG. MACH NUMBER 0.96967E+00
AVERAGE VELOCITY/UZERO

```

5-TH STATION AT 0.74008E-01

```

CENTERLINE LOCATION ( 0.00000E+00 , 0.00000E+00 , 0.74008E-01 ) /YZERO STEP SIZE 0.99351E-02
CENTERLINE ARC LENGTH= 0.74008E-01/YZERO

```

STATION	5	5	5	7	9	11	13	15	17	19
IZ	1	3	5	7	9	11	13	15	17	19
1	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
3	0.9940E-04	0.9940E-04	0.9940E-04	0.9940E-04	0.9940E-04	0.9940E-04	0.9940E-04	0.9940E-04	0.9940E-04	0.9940E-04
5	0.2475E-03	0.2475E-03	0.2475E-03	0.2475E-03	0.2475E-03	0.2475E-03	0.2475E-03	0.2475E-03	0.2475E-03	0.2475E-03
7	0.4674E-03	0.4674E-03	0.4674E-03	0.4674E-03	0.4674E-03	0.4674E-03	0.4674E-03	0.4674E-03	0.4674E-03	0.4674E-03
9	0.7922E-03	0.7922E-03	0.7922E-03	0.7922E-03	0.7922E-03	0.7922E-03	0.7922E-03	0.7922E-03	0.7922E-03	0.7922E-03
11	0.1269E-02	0.1269E-02	0.1269E-02	0.1269E-02	0.1269E-02	0.1269E-02	0.1269E-02	0.1269E-02	0.1269E-02	0.1269E-02
13	0.1961E-02	0.1961E-02	0.1961E-02	0.1961E-02	0.1961E-02	0.1961E-02	0.1961E-02	0.1961E-02	0.1961E-02	0.1961E-02
15	0.2955E-02	0.2955E-02	0.2955E-02	0.2955E-02	0.2955E-02	0.2955E-02	0.2955E-02	0.2955E-02	0.2955E-02	0.2955E-02
17	0.4365E-02	0.4365E-02	0.4365E-02	0.4365E-02	0.4365E-02	0.4365E-02	0.4365E-02	0.4365E-02	0.4365E-02	0.4365E-02
19	0.6334E-02	0.6334E-02	0.6334E-02	0.6334E-02	0.6334E-02	0.6334E-02	0.6334E-02	0.6334E-02	0.6334E-02	0.6334E-02
21	0.9039E-02	0.9039E-02	0.9039E-02	0.9039E-02	0.9039E-02	0.9039E-02	0.9039E-02	0.9039E-02	0.9039E-02	0.9039E-02

SAMPLE OUTPUT

[illegible]

	I2	41	43
IY			
1	0.0000E+00	0.0000E+00	
3	0.9940E-04	0.9940E-04	
5	0.2475E-03	0.2475E-03	
7	0.4674E-03	0.4674E-03	
9	0.7922E-03	0.7922E-03	
11	0.1269E-02	0.1269E-02	
13	0.1961E-02	0.1961E-02	
15	0.2955E-02	0.2955E-02	

17 0.4365E-02 0.4365E-02
 19 0.6334E-02 0.6334E-02
 21 0.9039E-02 0.9039E-02
 23 0.1269E-01 0.1269E-01
 25 0.1751E-01 0.1751E-01
 27 0.2376E-01 0.2376E-01
 29 0.3166E-01 0.3166E-01
 31 0.4143E-01 0.4143E-01
 33 0.5320E-01 0.5320E-01
 35 0.6703E-01 0.6703E-01
 37 0.8284E-01 0.8284E-01
 39 0.1004E+00 0.1004E+00
 41 0.1195E+00 0.1195E+00
 43 0.1395E+00 0.1395E+00
 45 0.1599E+00 0.1599E+00

STATION	5	****	2-REF	/YZERO	****	11	13	15	17	19	
IZ	1	3	5	7	9	11	13	15	17	19	
IY	1	0.0000E+00	0.3593E-04	0.8990E-04	0.1708E-03	0.2915E-03	0.4704E-03	0.7336E-03	0.1117E-02	0.1670E-02	0.2457E-02
3	0.0000E+00	0.3593E-04	0.8990E-04	0.1708E-03	0.2915E-03	0.4704E-03	0.7336E-03	0.1117E-02	0.1670E-02	0.2457E-02	
5	0.0000E+00	0.3593E-04	0.8990E-04	0.1708E-03	0.2915E-03	0.4704E-03	0.7336E-03	0.1117E-02	0.1670E-02	0.2457E-02	
7	0.0000E+00	0.3593E-04	0.8990E-04	0.1708E-03	0.2915E-03	0.4704E-03	0.7336E-03	0.1117E-02	0.1670E-02	0.2457E-02	
9	0.0000E+00	0.3593E-04	0.8990E-04	0.1708E-03	0.2915E-03	0.4704E-03	0.7336E-03	0.1117E-02	0.1670E-02	0.2457E-02	
11	0.0000E+00	0.3593E-04	0.8990E-04	0.1708E-03	0.2915E-03	0.4704E-03	0.7336E-03	0.1117E-02	0.1670E-02	0.2457E-02	
13	0.0000E+00	0.3593E-04	0.8990E-04	0.1708E-03	0.2915E-03	0.4704E-03	0.7336E-03	0.1117E-02	0.1670E-02	0.2457E-02	
15	0.0000E+00	0.3593E-04	0.8990E-04	0.1708E-03	0.2915E-03	0.4704E-03	0.7336E-03	0.1117E-02	0.1670E-02	0.2457E-02	
17	0.0000E+00	0.3593E-04	0.8990E-04	0.1708E-03	0.2915E-03	0.4704E-03	0.7336E-03	0.1117E-02	0.1670E-02	0.2457E-02	
19	0.0000E+00	0.3593E-04	0.8990E-04	0.1708E-03	0.2915E-03	0.4704E-03	0.7336E-03	0.1117E-02	0.1670E-02	0.2457E-02	
21	0.0000E+00	0.3593E-04	0.8990E-04	0.1708E-03	0.2915E-03	0.4704E-03	0.7336E-03	0.1117E-02	0.1670E-02	0.2457E-02	
23	0.0000E+00	0.3593E-04	0.8990E-04	0.1708E-03	0.2915E-03	0.4704E-03	0.7336E-03	0.1117E-02	0.1670E-02	0.2457E-02	
25	0.0000E+00	0.3593E-04	0.8990E-04	0.1708E-03	0.2915E-03	0.4704E-03	0.7336E-03	0.1117E-02	0.1670E-02	0.2457E-02	
27	0.0000E+00	0.3593E-04	0.8990E-04	0.1708E-03	0.2915E-03	0.4704E-03	0.7336E-03	0.1117E-02	0.1670E-02	0.2457E-02	
29	0.0000E+00	0.3593E-04	0.8990E-04	0.1708E-03	0.2915E-03	0.4704E-03	0.7336E-03	0.1117E-02	0.1670E-02	0.2457E-02	
31	0.0000E+00	0.3593E-04	0.8990E-04	0.1708E-03	0.2915E-03	0.4704E-03	0.7336E-03	0.1117E-02	0.1670E-02	0.2457E-02	
33	0.0000E+00	0.3593E-04	0.8990E-04	0.1708E-03	0.2915E-03	0.4704E-03	0.7336E-03	0.1117E-02	0.1670E-02	0.2457E-02	
37	0.0000E+00	0.3593E-04	0.8990E-04	0.1708E-03	0.2915E-03	0.4704E-03	0.7336E-03	0.1117E-02	0.1670E-02	0.2457E-02	
39	0.0000E+00	0.3593E-04	0.8990E-04	0.1708E-03	0.2915E-03	0.4704E-03	0.7336E-03	0.1117E-02	0.1670E-02	0.2457E-02	
41	0.0000E+00	0.3593E-04	0.8990E-04	0.1708E-03	0.2915E-03	0.4704E-03	0.7336E-03	0.1117E-02	0.1670E-02	0.2457E-02	
43	0.0000E+00	0.3593E-04	0.8990E-04	0.1708E-03	0.2915E-03	0.4704E-03	0.7336E-03	0.1117E-02	0.1670E-02	0.2457E-02	
45	0.0000E+00	0.3593E-04	0.8990E-04	0.1708E-03	0.2915E-03	0.4704E-03	0.7336E-03	0.1117E-02	0.1670E-02	0.2457E-02	

IZ 21 23 25 27 29 31 33 35 37 39
 IY
 1 0.3560E-02 0.5085E-02 0.7155E-02 0.9915E-02 0.1352E-01 0.1815E-01 0.2394E-01 0.3104E-01 0.3954E-01 0.4946E-01

[illegible]

12	41	43
----	----	----

1	0.6077E-01	0.7334E-01
3	0.6077E-01	0.7334E-01
5	0.6077E-01	0.7334E-01
7	0.6077E-01	0.7334E-01
9	0.6077E-01	0.7334E-01
11	0.6077E-01	0.7334E-01
13	0.6077E-01	0.7334E-01
15	0.6077E-01	0.7334E-01
17	0.6077E-01	0.7334E-01
19	0.6077E-01	0.7334E-01
21	0.6077E-01	0.7334E-01
23	0.6077E-01	0.7334E-01
25	0.6077E-01	0.7334E-01
27	0.6077E-01	0.7334E-01
29	0.6077E-01	0.7334E-01
31	0.6077E-01	0.7334E-01
33	0.6077E-01	0.7334E-01
35	0.6077E-01	0.7334E-01
37	0.6077E-01	0.7334E-01
39	0.6077E-01	0.7334E-01
41	0.6077E-01	0.7334E-01
43	0.6077E-01	0.7334E-01
45	0.6077E-01	0.7334E-01

VELOCITY VECTOR DISPLAYED IN COMPUTATIONAL COORDINATES

STATION	5	*****	VEL-S	/UZERO	*****	11	13	15	17	19
I2	1	3	5	7	9	11	13	15	17	19
IY										
1	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
3	0.0000E+00	0.1126E-01	0.3091E-01	0.5138E-01	0.6617E-01	0.8481E-01	0.1137E+00	0.1518E+00	0.1957E+00	0.2405E+00
5	0.0000E+00	0.1291E-01	0.3878E-01	0.8089E-01	0.1378E+00	0.2048E+00	0.2745E+00	0.3479E+00	0.4217E+00	0.4877E+00
7	0.0000E+00	0.2848E-01	0.7355E-01	0.1419E+00	0.2355E+00	0.3265E+00	0.3999E+00	0.4631E+00	0.5229E+00	0.5788E+00
9	0.0000E+00	0.4585E-01	0.1140E+00	0.2118E+00	0.3253E+00	0.4098E+00	0.4673E+00	0.5188E+00	0.5684E+00	0.6159E+00
11	0.0000E+00	0.5827E-01	0.1454E+00	0.2664E+00	0.3892E+00	0.4686E+00	0.5178E+00	0.5611E+00	0.6047E+00	0.6466E+00
13	0.0000E+00	0.6585E-01	0.1648E+00	0.2998E+00	0.4298E+00	0.5102E+00	0.5583E+00	0.5984E+00	0.6382E+00	0.6774E+00
15	0.0000E+00	0.7031E-01	0.1759E+00	0.3192E+00	0.4553E+00	0.5387E+00	0.5883E+00	0.6287E+00	0.6678E+00	0.7064E+00
17	0.0000E+00	0.7299E-01	0.1825E+00	0.3312E+00	0.4717E+00	0.5576E+00	0.6089E+00	0.6508E+00	0.6911E+00	0.7311E+00
19	0.0000E+00	0.7476E-01	0.1870E+00	0.3392E+00	0.4827E+00	0.5704E+00	0.6230E+00	0.6662E+00	0.7081E+00	0.7502E+00
21	0.0000E+00	0.7621E-01	0.1906E+00	0.3456E+00	0.4914E+00	0.5803E+00	0.6337E+00	0.6778E+00	0.7211E+00	0.7649E+00
23	0.0000E+00	0.7812E-01	0.1953E+00	0.3538E+00	0.5020E+00	0.5919E+00	0.6460E+00	0.6908E+00	0.7350E+00	0.7800E+00
25	0.0000E+00	0.8076E-01	0.2019E+00	0.3651E+00	0.5165E+00	0.6083E+00	0.6637E+00	0.7101E+00	0.7564E+00	0.8037E+00
27	0.0000E+00	0.8536E-01	0.2135E+00	0.3864E+00	0.5462E+00	0.6417E+00	0.6981E+00	0.7435E+00	0.7859E+00	0.8261E+00
29	0.0000E+00	0.6576E-01	0.1646E+00	0.3005E+00	0.4332E+00	0.5173E+00	0.5689E+00	0.6117E+00	0.6531E+00	0.6944E+00
31	0.0000E+00	0.6850E-01	0.1715E+00	0.3125E+00	0.4485E+00	0.5335E+00	0.5851E+00	0.6278E+00	0.6695E+00	0.7119E+00
33	0.0000E+00	0.6926E-01	0.1734E+00	0.3158E+00	0.4527E+00	0.5380E+00	0.5895E+00	0.6321E+00	0.6735E+00	0.7155E+00
35	0.0000E+00	0.6863E-01	0.1718E+00	0.3130E+00	0.4489E+00	0.5334E+00	0.5846E+00	0.6266E+00	0.6674E+00	0.7088E+00
37	0.0000E+00	0.6770E-01	0.1695E+00	0.3089E+00	0.4433E+00	0.5271E+00	0.5777E+00	0.6192E+00	0.6594E+00	0.6998E+00
39	0.0000E+00	0.6673E-01	0.1671E+00	0.3046E+00	0.4375E+00	0.5205E+00	0.5706E+00	0.6115E+00	0.6511E+00	0.6908E+00
41	0.0000E+00	0.6578E-01	0.1647E+00	0.3004E+00	0.4319E+00	0.5141E+00	0.5637E+00	0.6041E+00	0.6430E+00	0.6820E+00
43	0.0000E+00	0.6488E-01	0.1625E+00	0.2965E+00	0.4266E+00	0.5080E+00	0.5572E+00	0.5972E+00	0.6355E+00	0.6738E+00
45	0.0000E+00	0.6406E-01	0.1604E+00	0.2928E+00	0.4217E+00	0.5025E+00	0.5512E+00	0.5909E+00	0.6287E+00	0.6664E+00
I2	21	23	25	27	29	31	33	35	37	39
IY										
1	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
3	0.2818E+00	0.3159E+00	0.3394E+00	0.3502E+00	0.3484E+00	0.3379E+00	0.3234E+00	0.3083E+00	0.2944E+00	0.2823E+00
5	0.5430E+00	0.5876E+00	0.6212E+00	0.6422E+00	0.6492E+00	0.6433E+00	0.6288E+00	0.6108E+00	0.5923E+00	0.5750E+00
7	0.6278E+00	0.6698E+00	0.7047E+00	0.7306E+00	0.7448E+00	0.7465E+00	0.7391E+00	0.7269E+00	0.7131E+00	0.6993E+00
9	0.6609E+00	0.7016E+00	0.7369E+00	0.7648E+00	0.7823E+00	0.7881E+00	0.7848E+00	0.7766E+00	0.7664E+00	0.7557E+00
11	0.6869E+00	0.7256E+00	0.7611E+00	0.7907E+00	0.8109E+00	0.8200E+00	0.8203E+00	0.8158E+00	0.8093E+00	0.8020E+00
13	0.7147E+00	0.7509E+00	0.7859E+00	0.8170E+00	0.8399E+00	0.8523E+00	0.8564E+00	0.8558E+00	0.8533E+00	0.8499E+00
15	0.7440E+00	0.7799E+00	0.8149E+00	0.8475E+00	0.8733E+00	0.8889E+00	0.8964E+00	0.8997E+00	0.9013E+00	0.9019E+00
17	0.7712E+00	0.8110E+00	0.8495E+00	0.8851E+00	0.9138E+00	0.9318E+00	0.9417E+00	0.9479E+00	0.9526E+00	0.9566E+00
19	0.7933E+00	0.8380E+00	0.8840E+00	0.9279E+00	0.9611E+00	0.9804E+00	0.9909E+00	0.9957E+00	0.9981E+00	0.9989E+00
21	0.8102E+00	0.8580E+00	0.9084E+00	0.9586E+00	0.9955E+00	0.9999E+00	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01
23	0.8266E+00	0.8754E+00	0.9256E+00	0.9727E+00	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01
25	0.8518E+00	0.8991E+00	0.9436E+00	0.9794E+00	0.9988E+00	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01
27	0.8630E+00	0.8929E+00	0.9127E+00	0.9372E+00	0.9840E+00	0.9995E+00	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01

29	0.7364E+00	0.7809E+00	0.8324E+00	0.8972E+00	0.9717E+00	0.9991E+00	0.1000E+01	0.1000E+01	0.1000E+01
31	0.7564E+00	0.8045E+00	0.8580E+00	0.9181E+00	0.9790E+00	0.9997E+00	0.1000E+01	0.1000E+01	0.1000E+01
33	0.7595E+00	0.8068E+00	0.8590E+00	0.9168E+00	0.9745E+00	0.9998E+00	0.1000E+01	0.1000E+01	0.1000E+01
35	0.7519E+00	0.7983E+00	0.8495E+00	0.9068E+00	0.9655E+00	0.9995E+00	0.1000E+01	0.1000E+01	0.1000E+01
37	0.7421E+00	0.7873E+00	0.8374E+00	0.8937E+00	0.9532E+00	0.9977E+00	0.1000E+01	0.1000E+01	0.1000E+01
39	0.7320E+00	0.7760E+00	0.8247E+00	0.8797E+00	0.9395E+00	0.9919E+00	0.1000E+01	0.1000E+01	0.1000E+01
41	0.7222E+00	0.7651E+00	0.8122E+00	0.8657E+00	0.9248E+00	0.9802E+00	0.1000E+01	0.1000E+01	0.1000E+01
43	0.7132E+00	0.7549E+00	0.8006E+00	0.8524E+00	0.9103E+00	0.9677E+00	0.9996E+00	0.1000E+01	0.1000E+01
45	0.7050E+00	0.7457E+00	0.7901E+00	0.8401E+00	0.8965E+00	0.9547E+00	0.9984E+00	0.1000E+01	0.1000E+01

IZ 41 43

1	0.0000E+00	0.0000E+00
3	0.2722E+00	0.2640E+00
5	0.5598E+00	0.5470E+00
7	0.6867E+00	0.6758E+00
9	0.7458E+00	0.7370E+00
11	0.7951E+00	0.7889E+00
13	0.8466E+00	0.8436E+00
15	0.9024E+00	0.9030E+00
17	0.9603E+00	0.9639E+00
19	0.9993E+00	0.9995E+00
21	0.1000E+01	0.1000E+01
23	0.1000E+01	0.1000E+01
25	0.1000E+01	0.1000E+01
27	0.1000E+01	0.1000E+01
29	0.1000E+01	0.1000E+01
31	0.1000E+01	0.1000E+01
33	0.1000E+01	0.1000E+01
35	0.1000E+01	0.1000E+01
37	0.1000E+01	0.1000E+01
39	0.1000E+01	0.1000E+01
41	0.1000E+01	0.1000E+01
43	0.1000E+01	0.1000E+01
45	0.1000E+01	0.1000E+01

```
STATION 5 ***** /UZERO *****
```

	I2	1	3	5	7	9	11	13	15	17	19
IY											
1	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
3	0.0000E+00	-1.829E-03	-2.793E-03	-2.622E-03	-1.755E-03	-8.086E-04	-3.418E-04	-3.356E-04	-3.392E-04	-3.300E-04	-3.000E-04
5	0.0000E+00	-2.433E-03	-4.797E-03	-5.883E-03	-4.518E-03	-1.711E-03	0.3063E-03	0.2731E-04	0.3114E-04	0.7651E-04	0.0000E+00
7	0.0000E+00	-3.790E-03	-7.358E-03	-8.617E-03	-5.362E-03	-4.903E-04	0.2543E-03	0.3796E-03	0.4356E-03	0.5170E-03	0.0000E+00
9	0.0000E+00	-4.807E-03	-8.660E-03	-8.259E-03	-1.819E-03	0.5297E-03	0.9563E-03	0.1202E-02	0.1314E-02	0.1362E-02	0.0000E+00
11	0.0000E+00	-3.987E-03	-5.916E-03	-1.977E-03	0.7806E-03	0.1660E-02	0.2213E-02	0.2570E-02	0.2743E-02	0.2733E-02	0.0000E+00
13	0.0000E+00	-1.039E-03	0.1348E-03	0.1064E-02	0.2440E-02	0.3486E-02	0.4124E-02	0.4552E-02	0.4777E-02	0.4733E-02	0.0000E+00

```

15 0.0000E+00 0.3438E-03 0.1199E-02 0.2843E-02 0.4751E-02 0.6033E-02 0.6758E-02 0.7229E-02 0.7481E-02 0.7429E-02
17 0.0000E+00 0.9113E-03 0.2550E-02 0.5123E-02 0.7760E-02 0.9395E-02 0.1026E-01 0.1080E-01 0.1107E-01 0.1101E-01
19 0.0000E+00 0.1637E-02 0.4297E-02 0.8123E-02 0.1180E-01 0.1398E-01 0.1509E-01 0.1575E-01 0.1607E-01 0.1598E-01
21 0.0000E+00 0.2704E-02 0.6884E-02 0.1261E-01 0.1789E-01 0.2094E-01 0.2247E-01 0.2334E-01 0.2373E-01 0.2354E-01
23 0.0000E+00 0.4790E-02 0.1187E-01 0.2111E-01 0.2927E-01 0.3382E-01 0.3603E-01 0.3726E-01 0.3774E-01 0.3729E-01
25 0.0000E+00 0.1088E-01 0.2605E-01 0.4426E-01 0.5874E-01 0.6571E-01 0.6840E-01 0.6927E-01 0.6898E-01 0.6759E-01
27 0.0000E+00 0.2156E-01 0.5221E-01 0.9033E-01 0.1221E+00 0.1387E+00 0.1462E+00 0.1495E+00 0.1494E+00 0.1443E+00
29 0.0000E+00 0.7568E-02 0.1974E-01 0.3789E-01 0.5689E-01 0.6924E-01 0.7585E-01 0.7933E-01 0.7954E-01 0.7513E-01
31 0.0000E+00 0.2536E-02 0.6473E-02 0.1202E-01 0.1746E-01 0.2084E-01 0.2267E-01 0.2381E-01 0.2439E-01 0.2424E-01
33 0.0000E+00 0.1159E-02 0.2921E-02 0.5311E-02 0.7543E-02 0.8858E-02 0.9536E-02 0.9949E-02 0.1019E-01 0.1024E-01
35 0.0000E+00 0.6515E-03 0.1614E-02 0.2870E-02 0.3998E-02 0.4641E-02 0.4962E-02 0.5152E-02 0.5262E-02 0.5302E-02
37 0.0000E+00 0.4437E-03 0.1066E-02 0.1823E-02 0.2462E-02 0.2809E-02 0.2977E-02 0.3076E-02 0.3134E-02 0.3160E-02
39 0.0000E+00 0.3770E-03 0.8653E-03 0.1394E-02 0.1786E-02 0.1977E-02 0.2063E-02 0.2113E-02 0.2144E-02 0.2162E-02
41 0.0000E+00 0.4005E-03 0.8785E-03 0.1325E-02 0.1588E-02 0.1684E-02 0.1717E-02 0.1733E-02 0.1745E-02 0.1754E-02
43 0.0000E+00 0.5043E-03 0.1073E-02 0.1541E-02 0.1745E-02 0.1776E-02 0.1765E-02 0.1751E-02 0.1741E-02 0.1740E-02
45 0.0000E+00 0.7092E-03 0.1487E-02 0.2082E-02 0.2278E-02 0.2252E-02 0.2193E-02 0.2140E-02 0.2101E-02 0.2079E-02

```

```

IX 12 21 23 25 27 29 31 33 35 37 39

```

```

1 0.0000E+00 0.0000E+00 0.0000E+00 0.0000E+00 0.0000E+00 0.0000E+00 0.0000E+00 0.0000E+00 0.0000E+00 0.0000E+00
3 -1.241E-04 -2.512E-05 -1.013E-04 -3.686E-04 -7.356E-04 -1.060E-03 -1.252E-03 -1.327E-03 -1.337E-03 -1.315E-03
5 0.1304E-03 0.1463E-03 0.9826E-04 -1.800E-04 -1.751E-03 -3.187E-03 -4.073E-03 -4.442E-03 -4.524E-03 -4.478E-03
7 0.5823E-03 0.5633E-03 0.4253E-03 0.1635E-03 -1.1762E-03 -4.647E-03 -6.711E-03 -7.385E-03 -7.440E-03 -7.265E-03
9 0.1364E-02 0.1253E-02 0.9639E-03 0.4814E-03 -1.179E-03 -6.470E-03 -9.416E-03 -1.016E-02 -9.821E-03 -9.180E-03
11 0.2587E-02 0.2287E-02 0.1754E-02 0.9452E-03 -2.507E-04 -8.538E-03 -1.277E-02 -1.328E-02 -1.206E-02 -1.051E-02
13 0.4409E-02 0.3812E-02 0.2888E-02 0.1596E-02 0.1013E-03 -1.1130E-02 -1.1702E-02 -1.1682E-02 -1.1401E-02 -1.093E-02
15 0.6977E-02 0.6046E-02 0.4574E-02 0.2570E-02 0.3320E-03 -1.433E-02 -2.163E-02 -1.999E-02 -1.457E-02 -9.168E-03
17 0.1048E-01 0.9279E-02 0.7190E-02 0.4212E-02 0.9181E-03 -1.554E-02 -2.447E-02 -2.043E-02 -1.121E-02 -2.518E-03
19 0.1532E-01 0.1378E-01 0.1098E-01 0.6771E-02 0.2035E-02 -1.1343E-02 -2.485E-02 -1.877E-02 -6.817E-03 0.3431E-03
21 0.2252E-01 0.2018E-01 0.1584E-01 0.9257E-02 0.2000E-02 -2.298E-02 -4.361E-02 -3.309E-02 -1.619E-02 -2.302E-03
23 0.3538E-01 0.3102E-01 0.2272E-01 0.1005E-01 -2.318E-02 -8.094E-02 -8.029E-02 -5.521E-02 -2.904E-02 -9.951E-03
25 0.6415E-01 0.5547E-01 0.3555E-01 0.2968E-02 -1.961E-01 -1.983E-01 -1.378E-01 -8.239E-02 -4.323E-02 -1.831E-02
27 0.1291E+00 0.9476E-01 0.3907E-01 -3.693E-01 -5.986E-01 -3.574E-01 -1.883E-01 -1.019E-01 -5.351E-02 -2.514E-02
29 0.6445E-01 0.4598E-01 0.2024E-01 -4.865E-02 -1.762E-01 -1.783E-01 -1.324E-01 -8.544E-02 -5.025E-02 -2.660E-02
31 0.2308E-01 0.2051E-01 0.1623E-01 0.1040E-01 0.4114E-02 -9.949E-03 -3.515E-02 -3.876E-02 -3.082E-02 -2.009E-02
33 0.1010E-01 0.9700E-02 0.8915E-02 0.7592E-02 0.5646E-02 0.3329E-02 0.1237E-02 -1.946E-03 -8.293E-03 -8.760E-03
35 0.5276E-02 0.5179E-02 0.4983E-02 0.4627E-02 0.4025E-02 0.3170E-02 0.2222E-02 0.1292E-02 0.5590E-03 0.1105E-03
37 0.3160E-02 0.3136E-02 0.3082E-02 0.2975E-02 0.2767E-02 0.2417E-02 0.2026E-02 0.1563E-02 0.1087E-02 0.6672E-03
39 0.2169E-02 0.2169E-02 0.2159E-02 0.2129E-02 0.2051E-02 0.1889E-02 0.1706E-02 0.1479E-02 0.1203E-02 0.9033E-03
41 0.1763E-02 0.1770E-02 0.1774E-02 0.1770E-02 0.1738E-02 0.1648E-02 0.1530E-02 0.1404E-02 0.1231E-02 0.1015E-02
43 0.1743E-02 0.1749E-02 0.1753E-02 0.1750E-02 0.1727E-02 0.1659E-02 0.1554E-02 0.1456E-02 0.1316E-02 0.1130E-02
45 0.2068E-02 0.2061E-02 0.2051E-02 0.2032E-02 0.1992E-02 0.1911E-02 0.1780E-02 0.1661E-02 0.1502E-02 0.1296E-02

```

```

IX 41 43

```

```

IX 1 0.0000E+00 0.0000E+00
3 -1.282E-03 -1.245E-03
5 -4.389E-03 -4.288E-03
7 -7.050E-03 -6.838E-03

```

STATION	5	*****	VEL-JZ	/UZERO	*****	11	13	15	17	19
9	-.8576E-03	-.8067E-03								
11	-.9177E-03	-.8134E-03								
13	-.8442E-03	-.6597E-03								
15	-.5006E-03	-.2071E-03								
17	0.3834E-03	0.8003E-03								
19	0.1022E-02	0.1408E-02								
21	0.6627E-03	0.1154E-02								
23	0.1791E-03	0.8075E-03								
25	-.3685E-03	0.4003E-03								
27	-.8816E-03	-.2087E-04								
29	-.1185E-02	-.3656E-03								
31	-.1106E-02	-.5241E-03								
33	-.6618E-03	-.4435E-03								
35	-.9927E-04	-.1916E-03								
37	0.3416E-03	0.9595E-04								
39	0.6070E-03	0.3303E-03								
41	0.7674E-03	0.5036E-03								
43	0.9026E-03	0.6453E-03								
45	0.1050E-02	0.7763E-03								
I2	1	3	5	7	9	11	13	15	17	19
IY										
1	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
3	0.0000E+00	-.1603E-03	-.2403E-03	-.1750E-03	0.2104E-04	0.1787E-03	0.1105E-03	-.2089E-03	-.7153E-03	-.1372E-02
5	0.0000E+00	-.1076E-03	-.1608E-03	-.1248E-03	0.7705E-06	0.5947E-04	-.1186E-02	-.6339E-03	-.1496E-02	-.2707E-02
7	0.0000E+00	-.7289E-04	-.1046E-03	-.1029E-03	-.1320E-03	-.2927E-03	-.5672E-03	-.1041E-02	-.1905E-02	-.3244E-02
9	0.0000E+00	-.5644E-04	-.9641E-04	-.1518E-03	-.2777E-03	-.4944E-03	-.8137E-03	-.1294E-02	-.2112E-02	-.3459E-02
11	0.0000E+00	-.4558E-04	-.8874E-04	-.1625E-03	-.3046E-03	-.5508E-03	-.9304E-03	-.1487E-02	-.2335E-02	-.3680E-02
13	0.0000E+00	-.3423E-04	-.7083E-04	-.1340E-03	-.2615E-03	-.5204E-03	-.9683E-03	-.1646E-02	-.2618E-02	-.4032E-02
15	0.0000E+00	-.2361E-04	-.5255E-04	-.1068E-03	-.2294E-03	-.5029E-03	-.1006E-02	-.1805E-02	-.2962E-02	-.4562E-02
17	0.0000E+00	-.1572E-04	-.3961E-04	-.9135E-04	-.2222E-03	-.5273E-03	-.1100E-02	-.2030E-02	-.3404E-02	-.5296E-02
19	0.0000E+00	-.1079E-04	-.3409E-04	-.9282E-04	-.2498E-03	-.6158E-03	-.1300E-02	-.2416E-02	-.4081E-02	-.6394E-02
21	0.0000E+00	-.8888E-05	-.4009E-04	-.1270E-03	-.3528E-03	-.8505E-03	-.1754E-02	-.3212E-02	-.5388E-02	-.8434E-02
23	0.0000E+00	-.1214E-04	-.7036E-04	-.2345E-03	-.6289E-03	-.1431E-02	-.2830E-02	-.5052E-02	-.8370E-02	-.1305E-01
25	0.0000E+00	-.1536E-04	-.9201E-04	-.3108E-03	-.8396E-03	-.1928E-02	-.3879E-02	-.7129E-02	-.1236E-01	-.2048E-01
27	0.0000E+00	0.7647E-05	-.3403E-04	-.2187E-03	-.7809E-03	-.2009E-02	-.4130E-02	-.7345E-02	-.1168E-01	-.1665E-01
29	0.0000E+00	0.3670E-05	0.1107E-03	0.4753E-03	0.1351E-02	0.2944E-02	0.5452E-02	0.9189E-02	0.1456E-01	0.2192E-01
31	0.0000E+00	0.7952E-05	0.5550E-04	0.1984E-03	0.5083E-03	0.1009E-02	0.1729E-02	0.2750E-02	0.4220E-02	0.6314E-02
33	0.0000E+00	0.6685E-05	0.3551E-04	0.1182E-03	0.2740E-03	0.4642E-03	0.6511E-03	0.8299E-03	0.1032E-02	0.1339E-02
35	0.0000E+00	0.6215E-05	0.3146E-04	0.1031E-03	0.2312E-03	0.3652E-03	0.4541E-03	0.4749E-03	0.4342E-03	0.3813E-03
37	0.0000E+00	0.6264E-05	0.3118E-04	0.1015E-03	0.2260E-03	0.3510E-03	0.4218E-03	0.4100E-03	0.3160E-03	0.1803E-03
39	0.0000E+00	0.6426E-05	0.3173E-04	0.1031E-03	0.2297E-03	0.3576E-03	0.4304E-03	0.4182E-03	0.3197E-03	0.1739E-03
41	0.0000E+00	0.6564E-05	0.3232E-04	0.1050E-03	0.2350E-03	0.3683E-03	0.4480E-03	0.4437E-03	0.3542E-03	0.2189E-03
43	0.0000E+00	0.6642E-05	0.3270E-04	0.1064E-03	0.2391E-03	0.3774E-03	0.4642E-03	0.4686E-03	0.3899E-03	0.2689E-03
45	0.0000E+00	0.6606E-05	0.3260E-04	0.1064E-03	0.2401E-03	0.3813E-03	0.4724E-03	0.4823E-03	0.4107E-03	0.2998E-03

IY	IZ	21	23	25	27	29	31	33	35	37	39
1	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
3	-2208E-02	-3256E-02	-4419E-02	-5395E-02	-5764E-02	-5185E-02	-3745E-02	-2012E-02	-5416E-03	0.4577E-02	0.4577E-02
5	-4327E-02	-6402E-02	-8780E-02	-1097E-01	-1217E-01	-1155E-01	-9104E-02	-5846E-02	-2897E-02	-7466E-03	-7466E-03
7	-5115E-02	-7546E-02	-1038E-01	-1308E-01	-1471E-01	-1424E-01	-1156E-01	-7805E-02	-4297E-02	-7466E-03	-7466E-03
9	-5418E-02	-7991E-02	-1100E-01	-1390E-01	-1568E-01	-1527E-01	-1251E-01	-8586E-02	-4381E-02	-2062E-02	-2062E-02
11	-5682E-02	-8353E-02	-1149E-01	-1451E-01	-1637E-01	-1596E-01	-1313E-01	-9083E-02	-5254E-02	-2326E-02	-2326E-02
13	-6076E-02	-8817E-02	-1206E-01	-1517E-01	-1705E-01	-1655E-01	-1360E-01	-9438E-02	-5512E-02	-2505E-02	-2505E-02
15	-6742E-02	-9580E-02	-1290E-01	-1605E-01	-1784E-01	-1713E-01	-1395E-01	-9645E-02	-5643E-02	-2590E-02	-2590E-02
17	-7788E-02	-1090E-01	-1439E-01	-1751E-01	-1900E-01	-1778E-01	-1418E-01	-9667E-02	-5615E-02	-2562E-02	-2562E-02
19	-9422E-02	-1312E-01	-1707E-01	-2021E-01	-2099E-01	-1866E-01	-1426E-01	-9446E-02	-5390E-02	-2414E-02	-2414E-02
21	-1244E-01	-1729E-01	-2225E-01	-2550E-01	-2473E-01	-2022E-01	-1432E-01	-9010E-02	-4997E-02	-2172E-02	-2172E-02
23	-1192E-01	-2680E-01	-3424E-01	-3755E-01	-3223E-01	-2234E-01	-1378E-01	-7963E-02	-4209E-02	-1712E-02	-1712E-02
25	-3235E-01	-4770E-01	-6181E-01	-6155E-01	-4156E-01	-2141E-01	-1074E-01	-5572E-02	-2751E-02	-9205E-03	-9205E-03
27	-2091E-01	-2202E-01	-1770E-01	-9168E-02	-3485E-02	-2064E-02	-1476E-02	-9590E-03	-3808E-03	0.2964E-03	0.2964E-03
29	0.3121E-01	0.4124E-01	0.4837E-01	0.4560E-01	0.3326E-01	0.1901E-01	0.9374E-02	0.4593E-02	0.2522E-02	0.1824E-02	0.1824E-02
31	0.9142E-02	0.1257E-01	0.1604E-01	0.1857E-01	0.1913E-01	0.1600E-01	0.1122E-01	0.7224E-02	0.4592E-02	0.3170E-02	0.3170E-02
33	0.1854E-02	0.2692E-02	0.3975E-02	0.5806E-02	0.7968E-02	0.8758E-02	0.7881E-02	0.6432E-02	0.4937E-02	0.3774E-02	0.3774E-02
35	0.3886E-03	0.5438E-03	0.9869E-03	0.1936E-02	0.3495E-02	0.4782E-02	0.4909E-02	0.4675E-02	0.4181E-02	0.3601E-02	0.3601E-02
37	0.6133E-04	0.2272E-04	0.1714E-03	0.7006E-03	0.1788E-02	0.2977E-02	0.3272E-02	0.3337E-02	0.3258E-02	0.3061E-02	0.3061E-02
39	0.3339E-04	-5373E-04	-1156E-04	0.3080E-03	0.1072E-02	0.2114E-02	0.2462E-02	0.2536E-02	0.2551E-02	0.2497E-02	0.2497E-02
41	0.8856E-04	0.1329E-05	0.8909E-05	0.2176E-03	0.7665E-03	0.1615E-02	0.2042E-02	0.2064E-02	0.2060E-02	0.2023E-02	0.2023E-02
43	0.1561E-03	0.8349E-04	0.8452E-04	0.2298E-03	0.6217E-03	0.1271E-02	0.1754E-02	0.1735E-02	0.1681E-02	0.1615E-02	0.1615E-02
45	0.2003E-03	0.1405E-03	0.1406E-03	0.2433E-03	0.5164E-03	0.9895E-03	0.1441E-02	0.1419E-02	0.1310E-02	0.1206E-02	0.1206E-02

IY	IZ	41	43
1	0.0000E+00	0.0000E+00	0.0000E+00
3	0.1051E-02	0.1381E-02	0.1381E-02
5	0.6694E-03	0.1602E-02	0.1602E-02
7	0.1502E-03	0.1408E-02	0.1408E-02
9	-1034E-03	0.1286E-02	0.1286E-02
11	-2729E-03	0.1201E-02	0.1201E-02
13	-3868E-03	0.1145E-02	0.1145E-02
15	-4373E-03	0.1124E-02	0.1124E-02
17	-4158E-03	0.1143E-02	0.1143E-02
19	-3304E-03	0.1188E-02	0.1188E-02
21	-2035E-03	0.1244E-02	0.1244E-02
23	0.3231E-04	0.1347E-02	0.1347E-02
25	0.4283E-03	0.1516E-02	0.1516E-02
27	0.1029E-02	0.1773E-02	0.1773E-02
29	0.1806E-02	0.2113E-02	0.2113E-02
31	0.2578E-02	0.2475E-02	0.2475E-02
33	0.3061E-02	0.2731E-02	0.2731E-02
35	0.3104E-02	0.2768E-02	0.2768E-02
37	0.2811E-02	0.2578E-02	0.2578E-02
39	0.2385E-02	0.2245E-02	0.2245E-02

41 0.1952E-02 0.1857E-02
 43 0.1537E-02 0.1452E-02
 45 0.1111E-02 0.1025E-02

STATION	5	9	11	13	15	17	19
IZ	1	3	5	7	9	11	13
1	-2039E-07	-7893E+01	-7729E+01	-3961E+01	0.5074E+00	0.3375E+01	0.2562E+01
3	0.6964E+01	0.3931E+01	0.8041E+00	-8404E+00	-6084E+00	0.2477E+00	-9300E-01
5	0.7651E+01	0.6016E+01	0.3541E+01	0.4577E+00	-2097E+01	-2976E+01	-2691E+01
7	0.1204E+02	0.8955E+01	0.4545E+01	-8046E+00	-4156E+01	-2687E+01	-2035E+01
9	0.1576E+02	0.1080E+02	0.3850E+01	-3677E+01	-5738E+01	-2939E+01	-1385E+01
11	0.1399E+02	0.8036E+01	-1575E+00	-7666E+01	-7036E+01	-3187E+01	-1466E+01
13	0.5790E+01	0.1818E-02	-7680E+01	-1295E+02	-8785E+01	-3613E+01	-1599E+01
15	-6922E+01	-1188E+02	-1807E+02	-1988E+02	-1128E+02	-4241E+01	-1774E+01
17	-2293E+02	-2691E+02	-3132E+02	-2901E+02	-1483E+02	-5216E+01	-2060E+01
19	-4310E+02	-4617E+02	-4879E+02	-4160E+02	-2008E+02	-6788E+01	-2586E+01
21	-7249E+02	-7451E+02	-7490E+02	-6083E+02	-2835E+02	-9373E+01	-3514E+01
23	-1302E+03	-1293E+03	-1242E+03	-9577E+02	-4271E+02	-1368E+02	-4997E+01
25	-3021E+03	-2869E+03	-2572E+03	-1795E+03	-6971E+02	-1749E+02	-3327E+01
27	-5929E+03	-5713E+03	-5259E+03	-3836E+03	-1586E+03	-4429E+02	-9967E+01
29	-1956E+03	-2088E+03	-2231E+03	-2030E+03	-1093E+03	-3978E+02	-1479E+02
31	-6730E+02	-6946E+02	-7082E+02	-6023E+02	-3032E+02	-1084E+02	-4358E+01
33	-3148E+02	-3179E+02	-3138E+02	-2546E+02	-1210E+02	-4079E+01	-1541E+01
35	-1810E+02	-1779E+02	-1692E+02	-1315E+02	-6010E+01	-1960E+01	-7141E+00
37	-1268E+02	-1194E+02	-1065E+02	-7677E+01	-3308E+01	-1040E+01	-3700E+00
39	-1114E+02	-9884E+01	-7988E+01	-5022E+01	-1898E+01	-5471E+00	-1857E+00
41	-1216E+02	-1022E+02	-7414E+01	-3814E+01	-1081E+01	-2309E+00	-6053E-01
43	-1554E+02	-1262E+02	-8464E+01	-3555E+01	-5718E+00	0.1618E-01	0.4955E-01
45	-2199E+02	-1757E+02	-1132E+02	-4138E+01	-2212E+00	0.2687E+00	0.1811E+00

STATION	21	23	25	27	29	31	33	35	37	39
IZ	21	23	25	27	29	31	33	35	37	39
1	-2142E+02	-3006E+02	-3909E+02	-4576E+02	-4638E+02	-3840E+02	-2306E+02	-5933E+01	0.7788E+01	0.1634E+02
3	-2115E+02	-3204E+02	-4446E+02	-5564E+02	-6138E+02	-5777E+02	-4521E+02	-2899E+02	-1454E+02	-4113E+01
5	-7454E+01	-1075E+02	-1493E+02	-1960E+02	-2348E+02	-2466E+02	-2222E+02	-1732E+02	-1199E+02	-7454E+01
7	-1505E+01	-2122E+01	-2951E+01	-3930E+01	-4800E+01	-5179E+01	-4855E+01	-3996E+01	-2972E+01	-2037E+01
9	-5340E+00	-7204E+00	-9904E+00	-1309E+01	-1592E+01	-1723E+01	-1636E+01	-1375E+01	-1053E+01	-7473E+00
11	-3281E+00	-3933E+00	-5201E+00	-6772E+00	-8118E+00	-8676E+00	-8177E+00	-6866E+00	-5273E+00	-3766E+00
13	-2316E+00	-2352E+00	-2851E+00	-3579E+00	-4203E+00	-4397E+00	-4046E+00	-3316E+00	-2487E+00	-1734E+00
15	-1561E+00	-1385E+00	-1491E+00	-1739E+00	-1964E+00	-1988E+00	-1754E+00	-1367E+00	-9730E+01	-6364E-01
17	-9570E-01	-6644E-01	-6517E-01	-6936E-01	-7196E-01	-6741E-01	-5271E-01	-3525E-01	-2191E-01	-1067E-01
19	-7455E-01	-2916E-01	-1396E-01	-1020E-01	-1061E-01	-9134E-03	-5368E-04	-5800E-02	-9858E-02	-8189E-02
21	-9647E-01	-2519E-01	0.9116E-02	0.1950E-01	0.3452E-02	-2240E-02	-5683E-03	-1778E-03	-6184E-04	-3236E-04
23	-1102E+00	0.7499E-01	0.2495E+00	0.3069E+00	0.4212E-01	0.4133E-03	0.2087E-05	-1614E-07	-1810E-07	-1882E-07
25	0.1907E+01	0.2410E+01	0.4697E+01	0.5903E+01	0.1405E+01	0.1530E-01	0.3060E-04	0.4566E-08	-9575E-10	-8208E-10

```

27 0.3779E+02 0.5195E+02 0.5588E+02 0.5730E+02 0.1003E+02 0.3845E+00 0.1184E-02 0.1341E-05 0.8187E-10 -.6255E-10
29 0.8656E+01 0.9450E+01 0.7816E+01 0.3669E+01 0.8025E+00 0.2704E-01 0.7391E-03 0.7403E-05 0.6825E-08 -.4112E-10
31 0.5379E-01 0.1507E+00 0.1267E+00 0.4804E-01 -.3340E-02 -.4626E-03 0.1161E-04 0.7955E-07 0.6915E-10 -.1980E-10
33 -.5952E-02 0.1702E-01 0.1787E-01 0.1181E-01 0.4848E-02 0.7359E-04 0.1694E-06 0.2892E-09 0.1107E-10 -.2801E-11
35 0.8070E-02 0.1612E-01 0.1489E-01 0.1091E-01 0.6069E-02 0.6858E-03 0.5015E-06 0.5020E-09 0.1468E-10 0.4866E-11
37 0.4931E-02 0.9551E-02 0.9308E-02 0.7473E-02 0.4952E-02 0.1346E-02 0.3160E-05 0.8515E-09 0.1053E-10 0.5682E-11
39 0.5332E-03 0.4171E-02 0.5117E-02 0.4899E-02 0.3986E-02 0.1909E-02 0.2996E-04 0.3261E-08 0.6896E-11 0.4115E-11
41 -.1803E-02 0.1149E-02 0.2925E-02 0.3787E-02 0.3845E-02 0.2715E-02 0.1803E-03 0.2268E-07 0.6550E-11 0.2638E-11
43 -.6894E-03 0.9998E-03 0.3045E-02 0.4475E-02 0.4996E-02 0.4174E-02 0.7284E-03 0.4915E-06 0.2777E-10 0.1994E-11
45 0.7138E-02 0.5712E-02 0.6869E-02 0.8012E-02 0.8198E-02 0.6646E-02 0.2013E-02 0.4838E-05 0.1321E-09 0.2056E-11

```

```

IZ 41 43
IY
1 0.2060E+02 0.2210E+02
3 0.2710E+01 0.7188E+01
5 -.3915E+01 -.1069E+01
7 -.1251E+01 -.5682E+00
9 -.4804E+00 -.2394E+00
11 -.2442E+00 -.1237E+00
13 -.1094E+00 -.5345E-01
15 -.3732E-01 -.1648E-01
17 -.2748E-02 0.2424E-02
19 -.6124E-02 -.4166E-02
21 -.1774E-04 -.9170E-05
23 -.1401E-07 -.5477E-08
25 -.5542E-10 -.2987E-10
27 -.3764E-10 -.2007E-10
29 -.2605E-10 -.1318E-10
31 -.1459E-10 -.7408E-11
33 -.4889E-11 -.2738E-11
35 0.1024E-11 0.4440E-12
37 0.2939E-11 0.1757E-11
39 0.2562E-11 0.1616E-11
41 0.1617E-11 0.9238E-12
43 0.1026E-11 0.4095E-12
45 0.9601E-12 0.3206E-12

```

```

STATION 5 ***** CP/2 *****
IZ 1 3 5 7 9 11 13 15 17 19
IY
1 0.1558E-02 0.1570E-02 0.1579E-02 0.1585E-02 0.1587E-02 0.1586E-02 0.1583E-02 0.1581E-02 0.1576E-02 0.1565E-02
3 0.1577E-02 0.1577E-02 0.1580E-02 0.1583E-02 0.1585E-02 0.1586E-02 0.1584E-02 0.1582E-02 0.1577E-02 0.1565E-02
5 0.1581E-02 0.1581E-02 0.1582E-02 0.1583E-02 0.1585E-02 0.1586E-02 0.1586E-02 0.1584E-02 0.1579E-02 0.1567E-02
7 0.1584E-02 0.1585E-02 0.1585E-02 0.1586E-02 0.1587E-02 0.1588E-02 0.1588E-02 0.1587E-02 0.1582E-02 0.1569E-02
9 0.1593E-02 0.1593E-02 0.1593E-02 0.1593E-02 0.1593E-02 0.1593E-02 0.1593E-02 0.1591E-02 0.1585E-02 0.1572E-02
11 0.1606E-02 0.1606E-02 0.1605E-02 0.1605E-02 0.1604E-02 0.1603E-02 0.1600E-02 0.1597E-02 0.1590E-02 0.1575E-02

```

```

13 0.1620E-02 0.1619E-02 0.1618E-02 0.1617E-02 0.1616E-02 0.1613E-02 0.1610E-02 0.1604E-02 0.1595E-02 0.1579E-02
15 0.1629E-02 0.1628E-02 0.1628E-02 0.1627E-02 0.1625E-02 0.1623E-02 0.1618E-02 0.1612E-02 0.1601E-02 0.1582E-02
17 0.1634E-02 0.1634E-02 0.1633E-02 0.1632E-02 0.1631E-02 0.1628E-02 0.1624E-02 0.1618E-02 0.1606E-02 0.1584E-02
19 0.1636E-02 0.1636E-02 0.1635E-02 0.1634E-02 0.1633E-02 0.1631E-02 0.1627E-02 0.1620E-02 0.1607E-02 0.1582E-02
21 0.1624E-02 0.1623E-02 0.1623E-02 0.1622E-02 0.1620E-02 0.1618E-02 0.1614E-02 0.1607E-02 0.1592E-02 0.1562E-02
23 0.1497E-02 0.1496E-02 0.1495E-02 0.1494E-02 0.1492E-02 0.1489E-02 0.1485E-02 0.1475E-02 0.1454E-02 0.1411E-02
25 0.5281E-03 0.5272E-03 0.5260E-03 0.5243E-03 0.5223E-03 0.5193E-03 0.5135E-03 0.4985E-03 0.4581E-03 0.3537E-03
27 -2.656E-02 -2.656E-02 -2.658E-02 -2.660E-02 -2.669E-02 -2.693E-02 -2.755E-02 -2.897E-02 -3.204E-02 -3.810E-02
29 -9.058E-03 -9.046E-03 -9.027E-03 -8.996E-03 -8.949E-03 -8.894E-03 -8.871E-03 -8.894E-03 -9.468E-03 -1.076E-02
31 0.2579E-03 0.2581E-03 0.2584E-03 0.2590E-03 0.2598E-03 0.2610E-03 0.2625E-03 0.2637E-03 0.2631E-03 0.2561E-03
33 0.1275E-03 0.1276E-03 0.1277E-03 0.1278E-03 0.1280E-03 0.1282E-03 0.1285E-03 0.1290E-03 0.1294E-03 0.1294E-03
35 0.4055E-04 0.4057E-04 0.4061E-04 0.4065E-04 0.4071E-04 0.4079E-04 0.4094E-04 0.4119E-04 0.4157E-04 0.4203E-04
37 -7.510E-05 -7.503E-05 -7.491E-05 -7.477E-05 -7.464E-05 -7.444E-05 -7.381E-05 -7.234E-05 -6.977E-05 -6.602E-05
39 -3.692E-04 -3.691E-04 -3.691E-04 -3.691E-04 -3.692E-04 -3.694E-04 -3.693E-04 -3.685E-04 -3.667E-04 -3.639E-04
41 -5.276E-04 -5.276E-04 -5.277E-04 -5.278E-04 -5.281E-04 -5.285E-04 -5.288E-04 -5.285E-04 -5.274E-04 -5.253E-04
43 -5.231E-04 -5.232E-04 -5.233E-04 -5.235E-04 -5.240E-04 -5.247E-04 -5.253E-04 -5.255E-04 -5.251E-04 -5.239E-04
45 -2.845E-04 -2.846E-04 -2.849E-04 -2.853E-04 -2.860E-04 -2.870E-04 -2.882E-04 -2.892E-04 -2.898E-04 -2.899E-04

```

```

I2 21 23 25 27 29 31 33 35 37 39
IY
1 0.1536E-02 0.1477E-02 0.1371E-02 0.1207E-02 0.9898E-03 0.7588E-03 0.5572E-03 0.4010E-03 0.2867E-03 0.2072E-03
3 0.1536E-02 0.1477E-02 0.1372E-02 0.1207E-02 0.9897E-03 0.7586E-03 0.5569E-03 0.4008E-03 0.2866E-03 0.2071E-03
5 0.1538E-02 0.1478E-02 0.1372E-02 0.1207E-02 0.9894E-03 0.7580E-03 0.5563E-03 0.4003E-03 0.2863E-03 0.2069E-03
7 0.1539E-02 0.1479E-02 0.1373E-02 0.1207E-02 0.9888E-03 0.7570E-03 0.5553E-03 0.3996E-03 0.2858E-03 0.2066E-03
9 0.541E-02 0.1481E-02 0.1374E-02 0.1207E-02 0.9874E-03 0.7552E-03 0.5537E-03 0.3984E-03 0.2851E-03 0.2062E-03
11 0.1544E-02 0.1483E-02 0.1374E-02 0.1205E-02 0.9845E-03 0.7517E-03 0.5507E-03 0.3964E-03 0.2839E-03 0.2057E-03
13 0.1547E-02 0.1484E-02 0.1373E-02 0.1202E-02 0.9786E-03 0.7450E-03 0.5452E-03 0.3930E-03 0.2821E-03 0.2049E-03
15 0.1547E-02 0.1483E-02 0.1370E-02 0.1194E-02 0.9664E-03 0.7322E-03 0.5354E-03 0.3871E-03 0.2792E-03 0.2037E-03
17 0.1545E-02 0.1476E-02 0.1357E-02 0.1174E-02 0.9410E-03 0.7079E-03 0.5181E-03 0.3771E-03 0.2743E-03 0.2013E-03
19 0.1537E-02 0.1457E-02 0.1323E-02 0.1125E-02 0.8863E-03 0.6605E-03 0.4857E-03 0.3585E-03 0.2644E-03 0.1959E-03
21 0.1505E-02 0.1403E-02 0.1237E-02 0.1009E-02 0.7621E-03 0.5581E-03 0.4185E-03 0.3207E-03 0.2449E-03 0.1863E-03
23 0.1324E-02 0.1165E-02 0.9188E-03 0.6327E-03 0.4243E-03 0.3300E-03 0.2889E-03 0.2528E-03 0.2110E-03 0.1698E-03
25 0.1096E-03 -3.628E-03 -9.847E-03 -1.208E-02 -6.950E-03 -1.761E-03 0.5968E-04 0.1435E-03 0.1578E-03 0.1436E-03
27 -4.876E-02 -6.366E-02 -7.481E-02 -6.332E-02 -2.944E-02 -9.452E-03 -2.413E-03 0.495E-05 0.8853E-04 0.1078E-03
29 -1.343E-02 -1.764E-02 -2.169E-02 -2.137E-02 -1.533E-02 -8.036E-03 -3.243E-03 -8.160E-04 0.2755E-04 0.6938E-04
31 0.2331E-03 0.1796E-03 0.8263E-04 -4.936E-04 -1.652E-03 -1.874E-03 -1.304E-03 -5.479E-04 0.5558E-05 0.4138E-04
33 0.1281E-03 0.1233E-03 0.1114E-03 0.8735E-04 0.3919E-04 0.1318E-04 -3.749E-05 -2.013E-05 0.1207E-04 0.2841E-04
35 0.4249E-04 0.4272E-04 0.4220E-04 0.3964E-04 0.3288E-04 0.2336E-04 0.1667E-04 0.1355E-04 0.1543E-04 0.2126E-04
37 -6.075E-05 -5.323E-05 -4.253E-05 -2.913E-05 -1.936E-05 -1.441E-05 0.5567E-06 0.3376E-05 0.7090E-05 0.1196E-04
39 -3.594E-04 -3.520E-04 -3.394E-04 -3.186E-04 -2.886E-04 -2.498E-04 -1.922E-04 -1.246E-04 -5.592E-05 0.1139E-05
41 -5.217E-04 -5.151E-04 -5.029E-04 -4.811E-04 -4.455E-04 -3.937E-04 -3.203E-04 -2.341E-04 -1.483E-04 -6.865E-05
43 -5.213E-04 -5.159E-04 -5.051E-04 -4.848E-04 -4.497E-04 -3.963E-04 -3.225E-04 -2.372E-04 -1.554E-04 -8.292E-05
45 -2.889E-04 -2.857E-04 -2.777E-04 -2.620E-04 -2.350E-04 -1.960E-04 -1.486E-04 -9.884E-05 -5.560E-05 -2.030E-05

```

```

I2 41 43
IY
1 0.1547E-03 0.1211E-03
3 0.1547E-03 0.1210E-03
5 0.1546E-03 0.1210E-03

```

```

7 0.1544E-03 0.1208E-03
9 0.1542E-03 0.1207E-03
11 0.1539E-03 0.1206E-03
13 0.1537E-03 0.1206E-03
15 0.1532E-03 0.1204E-03
17 0.1518E-03 0.1193E-03
19 0.1485E-03 0.1168E-03
21 0.1436E-03 0.1140E-03
23 0.1354E-03 0.1095E-03
25 0.1221E-03 0.1023E-03
27 0.1031E-03 0.9163E-04
29 0.7985E-04 0.7757E-04
31 0.5744E-04 0.6175E-04
33 0.4040E-04 0.4670E-04
35 0.2817E-04 0.3374E-04
37 0.1745E-04 0.2253E-04
39 0.7425E-05 0.1283E-04
41 0.7624E-07 0.5697E-05
43 -.2260E-05 0.2445E-05
45 0.8312E-06 0.3119E-05
FRAME 6 0.0846 0.0000 0.0000 0.0000

WIDTH, HEIGHT, DEL Y, DEL Z: 6 0.20000E+00 0.11600E+00 0.00000E+00 0.00000E+00
ADI ** ITER PMAX DEXP DPF LOG RES-F LOG RES-S PXF LOG RES-S DPS TEST LOG RES
20 0.3227E-03 0.7118E-08 0.2392E-05 0.2203E+00 0.5944E+01 1.50
40 0.3362E-03 0.4547E-08 0.2396E-05 0.1352E+00 0.3795E+01 1.28
60 0.3431E-03 0.2534E-08 0.2397E-05 0.7385E-01 0.2114E+01 1.02
80 0.3468E-03 0.1394E-08 0.2398E-05 0.4019E-01 0.1162E+01 0.76
90 0.3481E-03 0.1033E-08 0.2398E-05 0.2969E-01 0.8619E+00 0.63

ITER RHO LOG RES-F DPF LOG RES-S PXF LOG RES-S DPS TEST LOG RES PXS TS TF TS ICONV
20 0.9731E+03 2.64 0.9765E-01 0.6921E+03 0.84 0.9965E-08 0.8084E-03 0.1776E+01 0.2677E+02 0
40 0.9731E+03 1.86 0.2392E-01 0.6921E+03 0.05 0.7311E-10 0.8085E-03 0.2910E+00 0.4344E+01 1
52 0.5585E+01 1.93 0.2343E+00 0.6921E+03 -0.59 0.1883E-08 0.8085E-03 0.3457E+00 0.9968E+00 5
ADI ** ITER PMAX DEXP DPF LOG RES-F LOG RES-S PXF LOG RES-S DPS TEST LOG RES
20 0.60138E-02 0.42178E-06 0.71001E-03 0.70137E+00 0.11881E+01 1.81
25 0.59911E-02 0.85860E-07 0.70990E-03 0.14331E+00 0.24189E+00 1.30
PRESSURE EQUATION CONVERGES

```

INTEGRATED PROPERTIES AT STATION 6

```

AREA 0.46393E-01/YZEROSQ
MASS FLUX 0.44970E-01*UZ/R/YS
MASS AVG. TOTAL PRESSURE COEFF/2 0.48000E+00

```



```

MASS AVG. TOTAL PRESSURE COEFF/2
WITHOUT VISCIOUS CORRECTION          0.48000E+00
MASS AVG. STATIC PRESSURE COEFF/2    0.19125E-09
MASS AVG. STATIC PRESSURE COEFF/2    0.19125E-09
WITHOUT VISCIOUS CORRECTION          0.97737E-02
MASS AVG. MACH NUMBER                 0.96934E+00
AVERAGE VELOCITY/UZERO
FRAME      7      0.0960      0.0000      0.0000

WIDTH, HEIGHT, DEL Y, DEL Z:  7  0.20000E+00  0.11600E+00  0.00000E+00  0.00000E+00
ADI ** ITER  PMAX  DPLP  RHSMAX  PTEST  RHS TEST  LOG RES
20 0.35609E-03 0.37969E-08 0.22517E-05 0.10663E+00 0.33725E+01 1.22
40 0.36245E-03 0.22627E-08 0.22532E-05 0.62429E-01 0.20085E+01 0.97
60 0.36581E-03 0.12509E-08 0.22538E-05 0.34195E-01 0.11100E+01 0.72
70 0.36687E-03 0.92762E-09 0.22540E-05 0.25285E-01 0.82301E+00 0.59

```

```

ITER  RHO  LOG RES-F  DPF  LOG RES-S  DPS  PXF  LOG RES  PXS  TF  TS  ICONV
20 0.9731E+03  2.64  0.6628E-01 0.6543E+03  0.83  0.8406E-08 0.7534E-03 0.2329E+01 0.3191E+02 0
40 0.9731E+03  1.86  0.1481E-01 0.6543E+03  0.06  0.8013E-10 0.7535E-03 0.3904E+00 0.5351E+01 1
57 0.5585E+01  1.37  0.1449E+00 0.6543E+03 -0.79 0.1139E-08 0.7535E-03 0.1271E+00 0.7539E+00 5
ADI ** ITER  PMAX  DPLP  RHSMAX  PTEST  RHS TEST  LOG RES
20 0.50409E-02 0.28967E-06 0.55194E-03 0.57465E+00 0.10496E+01 1.70
25 0.50221E-02 0.57832E-07 0.55188E-03 0.11516E+00 0.20958E+00 1.15
PRESSURE EQUATION CONVERGES

```

INTEGRATED PROPERTIES AT STATION 7

```

AREA
MASS FLUX
MASS AVG. TOTAL PRESSURE COEFF/2    0.46393E-01/YZEROSQ
MASS AVG. TOTAL PRESSURE COEFF/2    0.44953E-01*UZ/R/YS
WITHOUT VISCIOUS CORRECTION          0.47969E+00
MASS AVG. STATIC PRESSURE COEFF/2    0.47969E+00
MASS AVG. STATIC PRESSURE COEFF/2    0.27856E-09
WITHOUT VISCIOUS CORRECTION          0.27856E-09
MASS AVG. MACH NUMBER                 0.97704E-02
AVERAGE VELOCITY/UZERO               0.96896E+00
FRAME      8      0.1082      0.0000      0.0000

WIDTH, HEIGHT, DEL Y, DEL Z:  8  0.20000E+00  0.11600E+00  0.00000E+00  0.00000E+00
ADI ** ITER  PMAX  DPLP  RHSMAX  PTEST  RHS TEST  LOG RES
20 0.37757E-03 0.22582E-08 0.21650E-05 0.59808E-01 0.20861E+01 0.99
40 0.38301E-03 0.12660E-08 0.21660E-05 0.33053E-01 0.11690E+01 0.72
50 0.38477E-03 0.93792E-09 0.21662E-05 0.24376E-01 0.86595E+00 0.59

```

ITER	RHO	LOG RES-F	DPF	PXF	LOG RES-S	DPS	PXS	TF	TS	ICONV
20	0.9731E+03	2.61	0.2529E-01	0.6186E+03	0.80	0.7157E-08	0.7084E-03	0.2805E+01	0.3734E+02	0
40	0.9731E+03	1.83	0.5632E-02	0.6186E+03	0.02	0.8608E-10	0.7085E-03	0.4668E+00	0.6214E+01	1
57	0.5585E+01	1.54	0.1335E+00	0.6186E+03	-0.83	0.1039E-08	0.7085E-03	0.2388E+00	0.8741E+00	5

ADI ** ITER PMAX DELP RSMAX PTEST RHS TEST LOG RES
 20 0.42439E-02 0.20420E-06 0.43556E-03 0.48117E+00 0.93766E+00 1.61

PRESSURE EQUATION CONVERGES

INTEGRATED PROPERTIES AT STATION 8

AREA
 MASS FLUX
 MASS AVG. TOTAL PRESSURE COEFF/2
 MASS AVG. TOTAL PRESSURE COEFF/2
 WITHOUT VISCOS CORRECTION
 MASS AVG. STATIC PRESSURE COEFF/2
 MASS AVG. STATIC PRESSURE COEFF/2
 WITHOUT VISCOS CORRECTION
 MASS AVG. MACH NUMBER
 AVERAGE VELOCITY/UZERO

0.46393E-01/YZEROSQ
0.44934E-01*UZ/R/YS
0.47936E+00
0.47936E+00
-0.36172E-09
-0.36172E-09
0.97667E-02
0.96855E+00

FRAME 9 0.1212 0.0000 0.0000

WIDTH, HEIGHT, DEL Y, DEL Z: 9 0.20000E+00 0.11600E+00 0.00000E+00 0.00000E+00

ADI ** ITER	PMAX	DELP	RHS MAX	PTEST	RHS TEST	LOG RES
20	0.39309E-03	0.17467E-08	0.20194E-05	0.44435E-01	0.17299E+01	0.88
40	0.39767E-03	0.98345E-09	0.20202E-05	0.24730E-01	0.97362E+00	0.61
45	0.39847E-03	0.84671E-09	0.20203E-05	0.21249E-01	0.83820E+00	0.55

ITER	RHO	LOG RES-F	DPF	PXF	LOG RES-S	DPS	PXS	TF	TS	ICONV
20	0.9731E+03	2.56	0.3243E-01	0.6111E+03	0.76	0.6013E-08	0.6674E-03	0.3404E+01	0.4533E+02	0
40	0.9731E+03	1.78	0.1112E-01	0.6111E+03	-0.02	0.8269E-10	0.6675E-03	0.5648E+00	0.7521E+01	1
60	0.9731E+03	0.94	0.3820E-02	0.6111E+03	-0.86	0.4265E-11	0.6675E-03	0.8232E-01	0.1096E+01	1
62	0.5585E+01	1.40	0.7366E-01	0.6111E+03	-1.08	0.5702E-09	0.6675E-03	0.2367E+00	0.6517E+00	5

ADI ** ITER PMAX DELP RSMAX PTEST RHS TEST LOG RES
 20 0.35545E-02 0.14641E-06 0.34725E-03 0.41191E+00 0.84327E+00 1.61

PRESSURE EQUATION CONVERGES

INTEGRATED PROPERTIES AT STATION 9

```

AREA
MASS FLUX
MASS AVG. TOTAL PRESSURE COEFF/2
MASS AVG. TOTAL PRESSURE COEFF/2
    WITHOUT VISCOS CORRECTION
MASS AVG. STATIC PRESSURE COEFF/2
MASS AVG. STATIC PRESSURE COEFF/2
    WITHOUT VISCOS CORRECTION
MASS AVG. MACH NUMBER
AVERAGE VELOCITY/UZERO
    0.0000 0.0000
FRAME      10      0.1351
WIDTH, HEIGHT, DEL Y, DEL Z:  10  0.20000E+00  0.11600E+00  0.00000E+00  0.00000E+00
ADI ** ITER  PMAX      DELP      RHSMAX      PTEST      RHS TEST      LOG RES
      20 0.40599E-03 0.15627E-08 0.18378E-05 0.38490E-01 0.17006E+01      0.83
      40 0.41041E-03 0.90017E-09 0.18385E-05 0.21933E-01 0.97925E+00      0.57
      45 0.41119E-03 0.77609E-09 0.18386E-05 0.18874E-01 0.84423E+00      0.51
  
```

```

ITER  RHO      LOG RES-F      DPFF      PXF      LOG RES-S      DPS      PXS      TF      TS      ICONV
20 0.9731E+03  2.51      0.2672E-01 0.6185E+03  0.70      0.5076E-08 0.6295E-03 0.4099E+01 0.5459E+02  0
40 0.9731E+03  1.73      0.9278E-02 0.6185E+03 -0.07      0.7848E-10 0.6296E-03 0.6811E+00 0.9072E+01  1
60 0.9731E+03  0.89      0.3094E-02 0.6185E+03 -0.91      0.3868E-11 0.6296E-03 0.9984E-01 0.1330E+01  1
62 0.5585E+01  1.34      0.6563E-01 0.6185E+03 -1.13      0.5090E-09 0.6296E-03 0.2771E+00 0.7915E+00  5
ADI ** ITER  PMAX      DELP      RHSMAX      PTEST      RHS TEST      LOG RES
      20 0.30637E-02 0.10645E-06 0.27868E-03 0.34744E+00 0.76394E+00  1.62
PRESSURE EQUATION CONVERGES
  
```

INTEGRATED PROPERTIES AT STATION 10

```

AREA
MASS FLUX
MASS AVG. TOTAL PRESSURE COEFF/2
MASS AVG. TOTAL PRESSURE COEFF/2
    WITHOUT VISCOS CORRECTION
MASS AVG. STATIC PRESSURE COEFF/2
MASS AVG. STATIC PRESSURE COEFF/2
    WITHOUT VISCOS CORRECTION
MASS AVG. MACH NUMBER
AVERAGE VELOCITY/UZERO
    0.0000 0.0000
FRAME      11      0.1501
WIDTH, HEIGHT, DEL Y, DEL Z:  11  0.20000E+00  0.11600E+00  0.00000E+00  0.00000E+00
ADI ** ITER  PMAX      DELP      RHSMAX      PTEST      RHS TEST      LOG RES
      20 0.46393E-01/YZEROSQ
      0.44891E-01*UZ/R/YS
      0.47863E+00
      0.47863E+00
      -0.15799E-09
      -0.15799E-09
      0.97588E-02
      0.96762E+00
  
```

20 0.41783E-03 0.13790E-08 0.17853E-05 0.33004E-01 0.15449E+01 0.78
 40 0.42191E-03 0.80204E-09 0.17860E-05 0.19010E-01 0.89816E+00 0.52

ITER	RHO	LOG RES-F	DPF	PXF	LOG RES-S	DPS	PXS	TF	TS	ICONV
20	0.9731E+03	2.45	0.9107E-02	0.6285E+03	0.65	0.4415E-08	0.5996E-03	0.4830E+01	0.6404E+02	0
40	0.9731E+03	1.67	0.2802E-02	0.6285E+03	-0.13	0.7519E-10	0.5996E-03	0.8047E+00	0.1067E+02	1
60	0.9731E+03	0.84	0.9888E-03	0.6285E+03	-0.96	0.3798E-11	0.5996E-03	0.1188E+00	0.1576E+01	1
62	0.5585E+01	1.13	0.5846E-01	0.6285E+03	-1.18	0.4716E-09	0.5996E-03	0.2335E+00	0.9393E+00	5

ADI ** ITER PMAX DPLP RSMAX PTEST RHS TEST LOG RES
 20 0.27078E-02 0.78536E-07 0.22445E-03 0.29004E+00 0.69981E+00 1.62
 PRESSURE EQUATION CONVERGES

INTEGRATED PROPERTIES AT STATION 11

AREA
 MASS FLUX
 MASS AVG. TOTAL PRESSURE COEFF/2
 MASS AVG. TOTAL PRESSURE COEFF/2
 WITHOUT VISCOS CORRECTION
 MASS AVG. STATIC PRESSURE COEFF/2
 MASS AVG. STATIC PRESSURE COEFF/2
 WITHOUT VISCOS CORRECTION
 MASS AVG. MACH NUMBER
 AVERAGE VELOCITY/UZERO
 FRAME 12 0.1660 0.0000 0.0000

0.46393E-01/YZEROSQ
 0.44866E-01*UZ/R/YS
 0.47824E+00
 0.47824E+00
 -0.65276E-09
 -0.65276E-09
 0.97544E-02
 0.96709E+00

WIDTH, HEIGHT, DEL Y, DEL Z: 12 0.20000E+00 0.11600E+00 0.00000E+00
 ADI ** ITER PMAX DPLP RSMAX PTEST RHS TEST LOG RES
 20 0.42754E-03 0.11729E-08 0.16572E-05 0.27433E-01 0.14155E+01 0.71
 40 0.43107E-03 0.68096E-09 0.16577E-05 0.15797E-01 0.82156E+00 0.45

ITER	RHO	LOG RES-F	DPF	PXF	LOG RES-S	DPS	PXS	TF	TS	ICONV
20	0.9731E+03	2.39	0.4274E-01	0.6372E+03	0.60	0.3876E-08	0.5793E-03	0.5499E+01	0.7214E+02	0
40	0.9731E+03	1.62	0.1491E-01	0.6372E+03	-0.18	0.6931E-10	0.5793E-03	0.9201E+00	0.1207E+02	1
60	0.9731E+03	0.79	0.4937E-02	0.6372E+03	-1.01	0.3911E-11	0.5793E-03	0.1372E+00	0.1800E+01	1
67	0.5585E+01	1.08	0.3316E-01	0.6372E+03	-1.44	0.2868E-09	0.5793E-03	0.2676E+00	0.6639E+00	5

ADI ** ITER PMAX DPLP RSMAX PTEST RHS TEST LOG RES
 20 0.23956E-02 0.58491E-07 0.18099E-03 0.24416E+00 0.64635E+00 1.61
 PRESSURE EQUATION CONVERGES

Y	I2	41	43
1	0.0000E+00	0.0000E+00	0.0000E+00
3	0.9940E-04	0.9940E-04	0.9940E-04
5	0.2475E-03	0.2475E-03	0.2475E-03
7	0.4674E-03	0.4674E-03	0.4674E-03
9	0.7922E-03	0.7922E-03	0.7922E-03
11	0.1269E-02	0.1269E-02	0.1269E-02
13	0.1961E-02	0.1961E-02	0.1961E-02
15	0.2955E-02	0.2955E-02	0.2955E-02
17	0.4365E-02	0.4365E-02	0.4365E-02
19	0.6334E-02	0.6334E-02	0.6334E-02
21	0.9039E-02	0.9039E-02	0.9039E-02
23	0.1269E-01	0.1269E-01	0.1269E-01
25	0.1751E-01	0.1751E-01	0.1751E-01
27	0.2376E-01	0.2376E-01	0.2376E-01
29	0.3166E-01	0.3166E-01	0.3166E-01
31	0.4143E-01	0.4143E-01	0.4143E-01

38

[illegible]

12	1	3	5	7	9	11	13	15	17	19
1	2	4	6	8	10	12	14	16	18	20

[illegible][illegible]

1000

1	0.3560E-02	0.5085E-02	0.7155E-02	0.9915E-02	0.1352E-01	0.1815E-01	0.2394E-01	0.3104E-01	0.3954E-01	0.4946E-01
3	0.3560E-02	0.5085E-02	0.7155E-02	0.9915E-02	0.1352E-01	0.1815E-01	0.2394E-01	0.3104E-01	0.3954E-01	0.4946E-01
5	0.3560E-02	0.5085E-02	0.7155E-02	0.9915E-02	0.1352E-01	0.1815E-01	0.2394E-01	0.3104E-01	0.3954E-01	0.4946E-01
7	0.3560E-02	0.5085E-02	0.7155E-02	0.9915E-02	0.1352E-01	0.1815E-01	0.2394E-01	0.3104E-01	0.3954E-01	0.4946E-01
9	0.3560E-02	0.5085E-02	0.7155E-02	0.9915E-02	0.1352E-01	0.1815E-01	0.2394E-01	0.3104E-01	0.3954E-01	0.4946E-01
11	0.3560E-02	0.5085E-02	0.7155E-02	0.9915E-02	0.1352E-01	0.1815E-01	0.2394E-01	0.3104E-01	0.3954E-01	0.4946E-01
13	0.3560E-02	0.5085E-02	0.7155E-02	0.9915E-02	0.1352E-01	0.1815E-01	0.2394E-01	0.3104E-01	0.3954E-01	0.4946E-01
15	0.3560E-02	0.5085E-02	0.7155E-02	0.9915E-02	0.1352E-01	0.1815E-01	0.2394E-01	0.3104E-01	0.3954E-01	0.4946E-01
17	0.3560E-02	0.5085E-02	0.7155E-02	0.9915E-02	0.1352E-01	0.1815E-01	0.2394E-01	0.3104E-01	0.3954E-01	0.4946E-01

```

19 0.3560E-02 0.5085E-02 0.7155E-02 0.9915E-02 0.1352E-01 0.1815E-01 0.2394E-01 0.3104E-01 0.3954E-01 0.4946E-01
21 0.3560E-02 0.5085E-02 0.7155E-02 0.9915E-02 0.1352E-01 0.1815E-01 0.2394E-01 0.3104E-01 0.3954E-01 0.4946E-01
23 0.3560E-02 0.5085E-02 0.7155E-02 0.9915E-02 0.1352E-01 0.1815E-01 0.2394E-01 0.3104E-01 0.3954E-01 0.4946E-01
25 0.3560E-02 0.5085E-02 0.7155E-02 0.9915E-02 0.1352E-01 0.1815E-01 0.2394E-01 0.3104E-01 0.3954E-01 0.4946E-01
27 0.3560E-02 0.5085E-02 0.7155E-02 0.9915E-02 0.1352E-01 0.1815E-01 0.2394E-01 0.3104E-01 0.3954E-01 0.4946E-01
29 0.3560E-02 0.5085E-02 0.7155E-02 0.9915E-02 0.1352E-01 0.1815E-01 0.2394E-01 0.3104E-01 0.3954E-01 0.4946E-01
31 0.3560E-02 0.5085E-02 0.7155E-02 0.9915E-02 0.1352E-01 0.1815E-01 0.2394E-01 0.3104E-01 0.3954E-01 0.4946E-01
33 0.3560E-02 0.5085E-02 0.7155E-02 0.9915E-02 0.1352E-01 0.1815E-01 0.2394E-01 0.3104E-01 0.3954E-01 0.4946E-01
35 0.3560E-02 0.5085E-02 0.7155E-02 0.9915E-02 0.1352E-01 0.1815E-01 0.2394E-01 0.3104E-01 0.3954E-01 0.4946E-01
37 0.3560E-02 0.5085E-02 0.7155E-02 0.9915E-02 0.1352E-01 0.1815E-01 0.2394E-01 0.3104E-01 0.3954E-01 0.4946E-01
39 0.3560E-02 0.5085E-02 0.7155E-02 0.9915E-02 0.1352E-01 0.1815E-01 0.2394E-01 0.3104E-01 0.3954E-01 0.4946E-01
41 0.3560E-02 0.5085E-02 0.7155E-02 0.9915E-02 0.1352E-01 0.1815E-01 0.2394E-01 0.3104E-01 0.3954E-01 0.4946E-01
43 0.3560E-02 0.5085E-02 0.7155E-02 0.9915E-02 0.1352E-01 0.1815E-01 0.2394E-01 0.3104E-01 0.3954E-01 0.4946E-01
45 0.3560E-02 0.5085E-02 0.7155E-02 0.9915E-02 0.1352E-01 0.1815E-01 0.2394E-01 0.3104E-01 0.3954E-01 0.4946E-01

```

```

I2      41      43
IY

```

```

1 0.6077E-01 0.7334E-01
3 0.6077E-01 0.7334E-01
5 0.6077E-01 0.7334E-01
7 0.6077E-01 0.7334E-01
9 0.6077E-01 0.7334E-01
11 0.6077E-01 0.7334E-01
13 0.6077E-01 0.7334E-01
15 0.6077E-01 0.7334E-01
17 0.6077E-01 0.7334E-01
19 0.6077E-01 0.7334E-01
21 0.6077E-01 0.7334E-01
23 0.6077E-01 0.7334E-01
25 0.6077E-01 0.7334E-01
27 0.6077E-01 0.7334E-01
29 0.6077E-01 0.7334E-01
31 0.6077E-01 0.7334E-01
33 0.6077E-01 0.7334E-01
35 0.6077E-01 0.7334E-01
37 0.6077E-01 0.7334E-01
39 0.6077E-01 0.7334E-01
41 0.6077E-01 0.7334E-01
43 0.6077E-01 0.7334E-01
45 0.6077E-01 0.7334E-01

```

VELOCITY VECTOR DISPLAYED IN COMPUTATIONAL COORDINATES

```

STATION  I2      *****  VEL-S  /UZERO  *****
I2      1      3      5      7      9      11      13      15      17      19

```


IZ	21	23	25	27	29	31	33	35	37	39
1	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
3	0.0000E+00	0.8897E-02	0.2423E-01	0.4006E-01	0.5427E-01	0.7682E-01	0.1080E+00	0.1419E+00	0.1785E+00	0.2176E+00
5	0.0000E+00	0.1232E-01	0.3515E-01	0.7232E-01	0.1256E+00	0.1912E+00	0.2579E+00	0.3225E+00	0.3852E+00	0.4449E+00
7	0.0000E+00	0.2744E-01	0.6907E-01	0.1314E+00	0.2176E+00	0.3011E+00	0.3686E+00	0.4266E+00	0.4808E+00	0.5325E+00
9	0.0000E+00	0.4048E-01	0.1010E+00	0.1887E+00	0.2931E+00	0.3730E+00	0.4264E+00	0.4742E+00	0.5215E+00	0.5683E+00
11	0.0000E+00	0.5009E-01	0.1257E+00	0.2325E+00	0.3461E+00	0.4229E+00	0.4709E+00	0.5119E+00	0.5537E+00	0.5963E+00
13	0.0000E+00	0.5757E-01	0.1442E+00	0.2643E+00	0.3848E+00	0.4620E+00	0.5092E+00	0.5485E+00	0.5871E+00	0.6262E+00
15	0.0000E+00	0.6322E-01	0.1583E+00	0.2889E+00	0.4165E+00	0.4963E+00	0.5447E+00	0.5847E+00	0.6231E+00	0.6606E+00
17	0.0000E+00	0.6832E-01	0.1710E+00	0.3113E+00	0.4461E+00	0.5291E+00	0.5793E+00	0.6206E+00	0.6602E+00	0.6983E+00
19	0.0000E+00	0.7320E-01	0.1831E+00	0.3327E+00	0.4744E+00	0.5608E+00	0.6127E+00	0.6555E+00	0.6967E+00	0.7365E+00
21	0.0000E+00	0.7785E-01	0.1947E+00	0.3530E+00	0.5012E+00	0.5905E+00	0.6443E+00	0.6886E+00	0.7312E+00	0.7727E+00
23	0.0000E+00	0.8256E-01	0.2064E+00	0.3734E+00	0.5278E+00	0.6201E+00	0.6753E+00	0.7209E+00	0.7648E+00	0.8075E+00
25	0.0000E+00	0.8760E-01	0.2189E+00	0.3950E+00	0.5557E+00	0.6508E+00	0.7075E+00	0.7543E+00	0.7992E+00	0.8424E+00
27	0.0000E+00	0.9516E-01	0.2375E+00	0.4264E+00	0.5945E+00	0.6918E+00	0.7488E+00	0.7947E+00	0.8371E+00	0.8757E+00
29	0.0000E+00	0.7932E-01	0.1986E+00	0.3614E+00	0.5158E+00	0.6090E+00	0.6639E+00	0.7072E+00	0.7456E+00	0.7774E+00
31	0.0000E+00	0.6351E-01	0.1590E+00	0.2907E+00	0.4196E+00	0.5005E+00	0.5500E+00	0.5913E+00	0.6316E+00	0.6717E+00
33	0.0000E+00	0.6865E-01	0.1719E+00	0.3134E+00	0.4498E+00	0.5341E+00	0.5852E+00	0.6276E+00	0.6686E+00	0.7091E+00
35	0.0000E+00	0.6883E-01	0.1723E+00	0.3142E+00	0.4450E+00	0.5352E+00	0.5863E+00	0.6287E+00	0.6698E+00	0.7103E+00
37	0.0000E+00	0.6782E-01	0.1698E+00	0.3097E+00	0.4450E+00	0.5286E+00	0.5793E+00	0.6213E+00	0.6621E+00	0.7023E+00
39	0.0000E+00	0.6658E-01	0.1667E+00	0.3043E+00	0.4377E+00	0.5204E+00	0.5706E+00	0.6122E+00	0.6526E+00	0.6924E+00
41	0.0000E+00	0.6532E-01	0.1636E+00	0.2987E+00	0.4303E+00	0.5121E+00	0.5617E+00	0.6030E+00	0.6429E+00	0.6822E+00
43	0.0000E+00	0.6413E-01	0.1606E+00	0.2935E+00	0.4233E+00	0.5042E+00	0.5534E+00	0.5942E+00	0.6337E+00	0.6725E+00
45	0.0000E+00	0.6306E-01	0.1579E+00	0.2888E+00	0.4170E+00	0.4971E+00	0.5457E+00	0.5861E+00	0.6252E+00	0.6637E+00

IZ	21	23	25	27	29	31	33	35	37	39
1	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
3	0.2563E+00	0.2905E+00	0.3155E+00	0.3284E+00	0.3289E+00	0.3200E+00	0.3068E+00	0.2928E+00	0.2799E+00	0.2684E+00
5	0.4992E+00	0.5460E+00	0.5830E+00	0.6074E+00	0.6170E+00	0.6124E+00	0.5985E+00	0.5809E+00	0.5628E+00	0.5458E+00
7	0.5815E+00	0.6263E+00	0.6652E+00	0.6951E+00	0.7124E+00	0.7157E+00	0.7085E+00	0.6960E+00	0.6816E+00	0.6672E+00
9	0.6140E+00	0.6575E+00	0.6969E+00	0.7292E+00	0.7502E+00	0.7576E+00	0.7544E+00	0.7455E+00	0.7343E+00	0.7224E+00
11	0.6393E+00	0.6816E+00	0.7212E+00	0.7552E+00	0.7791E+00	0.7898E+00	0.7900E+00	0.7844E+00	0.7762E+00	0.7671E+00
13	0.6662E+00	0.7069E+00	0.7466E+00	0.7821E+00	0.8085E+00	0.8223E+00	0.8259E+00	0.8237E+00	0.8189E+00	0.8130E+00
15	0.6982E+00	0.7369E+00	0.7761E+00	0.8129E+00	0.8418E+00	0.8585E+00	0.8652E+00	0.8664E+00	0.8651E+00	0.8627E+00
17	0.7356E+00	0.7731E+00	0.8117E+00	0.8494E+00	0.8804E+00	0.8993E+00	0.9085E+00	0.9125E+00	0.9143E+00	0.9152E+00
19	0.7753E+00	0.8137E+00	0.8528E+00	0.8915E+00	0.9233E+00	0.9434E+00	0.9532E+00	0.9585E+00	0.9622E+00	0.9653E+00
21	0.8134E+00	0.8540E+00	0.8950E+00	0.9353E+00	0.9682E+00	0.9858E+00	0.9931E+00	0.9962E+00	0.9979E+00	0.9987E+00
23	0.8493E+00	0.8906E+00	0.9315E+00	0.9700E+00	0.9967E+00	0.9998E+00	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01
25	0.8838E+00	0.9227E+00	0.9577E+00	0.9836E+00	0.9994E+00	0.9995E+00	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01
27	0.9095E+00	0.9341E+00	0.9405E+00	0.9394E+00	0.9567E+00	0.9912E+00	0.9999E+00	0.1000E+01	0.1000E+01	0.1000E+01
29	0.8008E+00	0.8159E+00	0.8287E+00	0.8547E+00	0.9077E+00	0.9758E+00	0.9995E+00	0.1000E+01	0.1000E+01	0.1000E+01
31	0.7125E+00	0.7554E+00	0.8029E+00	0.8583E+00	0.9224E+00	0.9850E+00	0.9998E+00	0.1000E+01	0.1000E+01	0.1000E+01
33	0.7498E+00	0.7919E+00	0.8373E+00	0.8877E+00	0.9423E+00	0.9911E+00	0.9999E+00	0.1000E+01	0.1000E+01	0.1000E+01
35	0.7510E+00	0.7930E+00	0.8381E+00	0.8878E+00	0.9415E+00	0.9900E+00	0.1000E+01	0.1000E+01	0.1000E+01	0.1000E+01
37	0.7427E+00	0.7845E+00	0.8293E+00	0.8790E+00	0.9332E+00	0.9842E+00	0.9999E+00	0.1000E+01	0.1000E+01	0.1000E+01
39	0.7324E+00	0.7738E+00	0.8183E+00	0.8678E+00	0.9226E+00	0.9760E+00	0.9997E+00	0.1000E+01	0.1000E+01	0.1000E+01
41	0.7217E+00	0.7626E+00	0.8066E+00	0.8557E+00	0.9105E+00	0.9657E+00	0.9990E+00	0.1000E+01	0.1000E+01	0.1000E+01
43	0.7116E+00	0.7519E+00	0.7952E+00	0.8437E+00	0.8982E+00	0.9548E+00	0.9966E+00	0.1000E+01	0.1000E+01	0.1000E+01

SAMPLE OUTPUT

NAVY USERS MANUAL

45 0.7022E+00 0.7419E+00 0.8323E+00 0.8862E+00 0.9435E+00 0.9921E+00 0.1000E+01 0.1000E+01 0.1000E+01

IY IZ 41 43

1 0.0000E+00 0.0000E+00
 3 0.2588E+00 0.2509E+00
 5 0.5308E+00 0.5182E+00
 7 0.6540E+00 0.6426E+00
 9 0.7113E+00 0.7015E+00
 11 0.7584E+00 0.7507E+00
 13 0.8073E+00 0.8024E+00
 15 0.8604E+00 0.8587E+00
 17 0.9162E+00 0.9176E+00
 19 0.9686E+00 0.9722E+00
 21 0.9993E+00 0.9996E+00
 23 0.1000E+01 0.1000E+01
 25 0.1000E+01 0.1000E+01
 27 0.1000E+01 0.1000E+01
 29 0.1000E+01 0.1000E+01
 31 0.1000E+01 0.1000E+01
 33 0.1000E+01 0.1000E+01
 35 0.1000E+01 0.1000E+01
 37 0.1000E+01 0.1000E+01
 39 0.1000E+01 0.1000E+01
 41 0.1000E+01 0.1000E+01
 43 0.1000E+01 0.1000E+01
 45 0.1000E+01 0.1000E+01

STATION IZ 12 ***** VEL-IY /UZERO *****

IY IZ 1 3 5 7 9 11 13 15 17 19
 1 0.0000E+00 0.0000E+00 0.0000E+00 0.0000E+00 0.0000E+00 0.0000E+00 0.0000E+00 0.0000E+00 0.0000E+00 0.0000E+00
 3 0.0000E+00 -0.9979E-04 -0.1448E-03 -0.1293E-03 -0.8973E-04 -0.5360E-04 -0.2686E-04 -0.6769E-05 0.7815E-05 0.1807E-04
 5 0.0000E+00 -0.8128E-04 -0.1584E-03 -0.1950E-03 -0.1630E-03 -0.8262E-04 -0.7144E-07 0.6503E-04 0.1125E-03 0.1462E-03
 7 0.0000E+00 -0.5585E-04 -0.1137E-03 -0.1449E-03 -0.9968E-04 0.1576E-04 0.1411E-03 0.2571E-03 0.3485E-03 0.4134E-03
 9 0.0000E+00 -0.1832E-04 -0.2312E-04 0.1608E-04 0.1340E-03 0.2966E-03 0.4490E-03 0.5996E-03 0.7393E-03 0.8448E-03
 11 0.0000E+00 0.4352E-04 0.1335E-03 0.3061E-03 0.5540E-03 0.7877E-03 0.9819E-03 0.1173E-02 0.1362E-02 0.1515E-02
 13 0.0000E+00 0.1408E-03 0.3818E-03 0.7657E-03 0.1219E-02 0.1576E-02 0.1841E-02 0.2093E-02 0.2343E-02 0.2548E-02
 15 0.0000E+00 0.2930E-03 0.7696E-03 0.1482E-02 0.2254E-02 0.2813E-02 0.3196E-02 0.3539E-02 0.3871E-02 0.4138E-02
 17 0.0000E+00 0.5415E-03 0.1398E-02 0.2629E-02 0.3896E-02 0.4761E-02 0.5321E-02 0.5797E-02 0.6235E-02 0.6571E-02
 19 0.0000E+00 0.9593E-03 0.2441E-02 0.4505E-02 0.6536E-02 0.7859E-02 0.8676E-02 0.9337E-02 0.9910E-02 0.1031E-01
 21 0.0000E+00 0.1684E-02 0.4227E-02 0.7662E-02 0.1091E-01 0.1293E-01 0.1413E-01 0.1505E-01 0.1579E-01 0.1624E-01
 23 0.0000E+00 0.3086E-02 0.7632E-02 0.1356E-01 0.1891E-01 0.2208E-01 0.2386E-01 0.2515E-01 0.2610E-01 0.2652E-01
 25 0.0000E+00 0.6510E-02 0.1583E-01 0.2743E-01 0.3710E-01 0.4222E-01 0.4467E-01 0.4604E-01 0.4667E-01 0.4647E-01
 27 0.0000E+00 0.1253E-01 0.3047E-01 0.5264E-01 0.7091E-01 0.8069E-01 0.8560E-01 0.8857E-01 0.8997E-01 0.8894E-01
 29 0.0000E+00 0.9108E-02 0.2312E-01 0.4267E-01 0.6152E-01 0.7296E-01 0.7898E-01 0.8234E-01 0.8278E-01 0.7871E-01

31	0.0000E+00	0.3111E-02	0.7814E-02	0.1431E-01	0.2071E-01	0.2476E-01	0.2705E-01	0.2857E-01	0.2938E-01	0.2910E-01
33	0.0000E+00	0.1240E-02	0.3102E-02	0.5616E-02	0.8010E-02	0.9495E-02	0.1035E-01	0.1099E-01	0.1148E-01	0.1178E-01
35	0.0000E+00	0.6986E-03	0.1752E-02	0.3164E-02	0.4493E-02	0.5302E-02	0.5758E-02	0.6090E-02	0.6348E-02	0.6519E-02
37	0.0000E+00	0.4805E-03	0.1206E-02	0.2177E-02	0.3084E-02	0.3630E-02	0.3930E-02	0.4142E-02	0.4298E-02	0.4394E-02
39	0.0000E+00	0.3832E-03	0.9622E-03	0.1735E-02	0.2455E-02	0.2884E-02	0.3116E-02	0.3273E-02	0.3383E-02	0.3440E-02
41	0.0000E+00	0.3455E-03	0.8680E-03	0.1565E-02	0.2215E-02	0.2602E-02	0.2808E-02	0.2944E-02	0.3033E-02	0.3069E-02
43	0.0000E+00	0.3470E-03	0.8726E-03	0.1575E-02	0.2235E-02	0.2627E-02	0.2836E-02	0.2972E-02	0.3055E-02	0.3082E-02
45	0.0000E+00	0.3820E-03	0.9621E-03	0.1741E-02	0.2476E-02	0.2916E-02	0.3151E-02	0.3303E-02	0.3394E-02	0.3418E-02

IY	12	21	23	25	27	29	31	33	35	37	39
----	----	----	----	----	----	----	----	----	----	----	----

1	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
3	0.2500E-04	0.2761E-04	0.2539E-04	0.2539E-04	0.1925E-04	0.1172E-04	0.5878E-05	0.3459E-05	0.4298E-05	0.6632E-05	0.8885E-05
5	0.1655E-03	0.1666E-03	0.1465E-03	0.1465E-03	0.1080E-03	0.6167E-04	0.2381E-04	0.6727E-05	0.9981E-05	0.2269E-04	0.3516E-04
7	0.4477E-03	0.4418E-03	0.3878E-03	0.3878E-03	0.2877E-03	0.1633E-03	0.5727E-04	0.6858E-05	0.1354E-04	0.4780E-04	0.8232E-04
9	0.8985E-03	0.8810E-03	0.7746E-03	0.7746E-03	0.5781E-03	0.3285E-03	0.1105E-03	0.3739E-05	0.1458E-04	0.8361E-04	0.1545E-03
11	0.1592E-02	0.1554E-02	0.1368E-02	0.1368E-02	0.1024E-02	0.5824E-03	0.1910E-03	0.3941E-05	0.1234E-04	0.1347E-03	0.2618E-03
13	0.2648E-02	0.2574E-02	0.2265E-02	0.2265E-02	0.1698E-02	0.9633E-03	0.3073E-03	0.2181E-04	0.2483E-05	0.2053E-03	0.4177E-03
15	0.4254E-02	0.4113E-02	0.3612E-02	0.3612E-02	0.2701E-02	0.1517E-02	0.4606E-03	0.6697E-04	0.2787E-04	0.2955E-03	0.6339E-03
17	0.6689E-02	0.6428E-02	0.5617E-02	0.5617E-02	0.4163E-02	0.2275E-02	0.6150E-03	0.1914E-03	0.1161E-03	0.3884E-03	0.9088E-03
19	0.1038E-01	0.9900E-02	0.8570E-02	0.8570E-02	0.6211E-02	0.3174E-02	0.6092E-03	0.5430E-03	0.3606E-03	0.4246E-03	0.1206E-02
21	0.1616E-01	0.1521E-01	0.1291E-01	0.1291E-01	0.8881E-02	0.3810E-02	0.5035E-04	0.1496E-02	0.1030E-02	0.1457E-03	0.1206E-02
23	0.2605E-01	0.2406E-01	0.1963E-01	0.1963E-01	0.1187E-01	0.2404E-02	0.3229E-02	0.4238E-02	0.2873E-02	0.1009E-02	0.4767E-03
25	0.4501E-01	0.4096E-01	0.3149E-01	0.3149E-01	0.1356E-01	0.5463E-02	0.1165E-01	0.9154E-02	0.5448E-02	0.2437E-02	0.4002E-03
27	0.8299E-01	0.6598E-01	0.3757E-01	0.3757E-01	0.4405E-02	0.2129E-01	0.2412E-01	0.1496E-01	0.7877E-02	0.3693E-02	0.1208E-02
29	0.6841E-01	0.5115E-01	0.2733E-01	0.2733E-01	0.1499E-02	0.1472E-01	0.1811E-01	0.1301E-01	0.7514E-02	0.3867E-02	0.1583E-02
31	0.2724E-01	0.2330E-01	0.1715E-01	0.1715E-01	0.9547E-02	0.2400E-02	0.2242E-02	0.3895E-02	0.3525E-02	0.2364E-02	0.1190E-02
33	0.1179E-01	0.1139E-01	0.1040E-01	0.1040E-01	0.8724E-02	0.6427E-02	0.3862E-02	0.1664E-02	0.2989E-03	0.2279E-03	0.2195E-03
35	0.6583E-02	0.6513E-02	0.6271E-02	0.6271E-02	0.5804E-02	0.5065E-02	0.4058E-02	0.2970E-02	0.1961E-02	0.1185E-02	0.7023E-03
37	0.4424E-02	0.4383E-02	0.4264E-02	0.4264E-02	0.4054E-02	0.3733E-02	0.3287E-02	0.2790E-02	0.2256E-02	0.1710E-02	0.1221E-02
39	0.3443E-02	0.3395E-02	0.3298E-02	0.3298E-02	0.3151E-02	0.2952E-02	0.2692E-02	0.2410E-02	0.2126E-02	0.1785E-02	0.1413E-02
41	0.3054E-02	0.2991E-02	0.2888E-02	0.2888E-02	0.2751E-02	0.2581E-02	0.2376E-02	0.2165E-02	0.1985E-02	0.1756E-02	0.1473E-02
43	0.3052E-02	0.2970E-02	0.2847E-02	0.2847E-02	0.2695E-02	0.2518E-02	0.2320E-02	0.2114E-02	0.1964E-02	0.1779E-02	0.1539E-02
45	0.3373E-02	0.3265E-02	0.3110E-02	0.3110E-02	0.2924E-02	0.2717E-02	0.2493E-02	0.2265E-02	0.2099E-02	0.1913E-02	0.1668E-02

IY	41	43
----	----	----

1	0.0000E+00	0.0000E+00
3	0.1041E-04	0.1121E-04
5	0.4373E-04	0.4848E-04
7	0.1065E-03	0.1202E-03
9	0.2047E-03	0.2335E-03
11	0.3527E-03	0.4054E-03
13	0.5704E-03	0.6594E-03
15	0.8778E-03	0.1020E-02
17	0.1282E-02	0.1497E-02
19	0.1758E-02	0.2070E-02
21	0.1895E-02	0.2232E-02
23	0.1403E-02	0.1852E-02

25 0.8023E-03 0.1380E-02
 27 0.1983E-03 0.8731E-03
 29 -.2421E-03 0.4196E-03
 31 -.3281E-03 0.1376E-03
 33 -.2809E-04 0.9946E-04
 35 0.4387E-03 0.2568E-03
 37 0.8179E-03 0.4770E-03
 39 0.1034E-02 0.6622E-03
 41 0.1149E-02 0.7972E-03
 43 0.1246E-02 0.9101E-03
 45 0.1368E-02 0.1025E-02

STATION	12	*****	VEL-JZ	/UZERO	*****	11	13	15	17	19
IY	1	3	5	7	9	11	13	15	17	19
1	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
3	0.0000E+00	-.9664E-04	-.1631E-03	-.1763E-03	-.1414E-03	-.1008E-03	-.9652E-04	-.1555E-03	-.3087E-03	-.6005E-03
5	0.0000E+00	-.7000E-04	-.1357E-03	-.1925E-03	-.2221E-03	-.2415E-03	-.3017E-03	-.4662E-03	-.8023E-03	-.1387E-02
7	0.0000E+00	-.4927E-04	-.9693E-04	-.1542E-03	-.2275E-03	-.3311E-03	-.4812E-03	-.7169E-03	-.1126E-02	-.1807E-02
9	0.0000E+00	-.3505E-04	-.6987E-04	-.1193E-03	-.2008E-03	-.3305E-03	-.5256E-03	-.8173E-03	-.1275E-02	-.2004E-02
11	0.0000E+00	-.2516E-04	-.5166E-04	-.9480E-04	-.1751E-03	-.3140E-03	-.5315E-03	-.8647E-03	-.1377E-02	-.2165E-02
13	0.0000E+00	-.1837E-04	-.3938E-04	-.7848E-04	-.1585E-03	-.3055E-03	-.5453E-03	-.9183E-03	-.1491E-02	-.2355E-02
15	0.0000E+00	-.1393E-04	-.3244E-04	-.7220E-04	-.1594E-03	-.3239E-03	-.5963E-03	-.1023E-02	-.1673E-02	-.2641E-02
17	0.0000E+00	-.1128E-04	-.3051E-04	-.7739E-04	-.1831E-03	-.3817E-03	-.7089E-03	-.1218E-02	-.1988E-02	-.3115E-02
19	0.0000E+00	-.9751E-05	-.3269E-04	-.9365E-04	-.2317E-03	-.4873E-03	-.9039E-03	-.1547E-02	-.2509E-02	-.3900E-02
21	0.0000E+00	-.9138E-05	-.3968E-04	-.1252E-03	-.3180E-03	-.6701E-03	-.1238E-02	-.2108E-02	-.3400E-02	-.5252E-02
23	0.0000E+00	-.9780E-05	-.5473E-04	-.1844E-03	-.4743E-03	-.9987E-03	-.1842E-02	-.3134E-02	-.5052E-02	-.7795E-02
25	0.0000E+00	-.1143E-04	-.7296E-04	-.2521E-03	-.6498E-03	-.1367E-02	-.2531E-02	-.4343E-02	-.7121E-02	-.1128E-01
27	0.0000E+00	-.1647E-04	-.8573E-04	-.2958E-03	-.8001E-03	-.1744E-02	-.3263E-02	-.5534E-02	-.8731E-02	-.1284E-01
29	0.0000E+00	0.2574E-04	0.1007E-03	0.3003E-03	0.7334E-03	0.1498E-02	0.2701E-02	0.4508E-02	0.7128E-02	0.1075E-01
31	0.0000E+00	-.3069E-05	0.2307E-04	0.1217E-03	0.3776E-03	0.8816E-03	0.1724E-02	0.3032E-02	0.4970E-02	0.7674E-02
33	0.0000E+00	0.1187E-05	0.1006E-04	0.3681E-04	0.1002E-03	0.2206E-03	0.4201E-03	0.7328E-03	0.1209E-02	0.1912E-02
35	0.0000E+00	0.3102E-06	0.2484E-05	0.9447E-05	0.2638E-04	0.5900E-04	0.1136E-03	0.2003E-03	0.3354E-03	0.5436E-03
37	0.0000E+00	0.3457E-07	0.6363E-06	0.2866E-05	0.8627E-05	0.2009E-04	0.3965E-04	0.7136E-04	0.1224E-03	0.2051E-03
39	0.0000E+00	-.3741E-07	0.1469E-06	0.9954E-06	0.3331E-05	0.8116E-05	0.1644E-04	0.3027E-04	0.5344E-04	0.9340E-04
41	0.0000E+00	-.6606E-07	0.2963E-07	0.5178E-06	0.1836E-05	0.4465E-05	0.8989E-05	0.1653E-04	0.2950E-04	0.5301E-04
43	0.0000E+00	-.8783E-07	0.2359E-07	0.4840E-06	0.1584E-05	0.3567E-05	0.6796E-05	0.1201E-04	0.2086E-04	0.3711E-04
45	0.0000E+00	-.1294E-06	0.1281E-07	0.5028E-06	0.1540E-05	0.3205E-05	0.5720E-05	0.9592E-05	0.1598E-04	0.2771E-04

STATION	12	*****	VEL-JZ	/UZERO	*****	11	13	15	17	19
IY	21	23	25	27	29	31	33	35	37	39
1	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
3	-.1078E-02	-.1759E-02	-.2580E-02	-.3356E-02	-.3800E-02	-.3657E-02	-.2898E-02	-.1800E-02	-.7324E-03	0.1096E-03
5	-.2294E-02	-.3556E-02	-.5084E-02	-.6575E-02	-.7499E-02	-.7305E-02	-.5871E-02	-.3717E-02	-.1573E-02	0.1489E-03
7	-.2852E-02	-.4307E-02	-.6090E-02	-.7874E-02	-.9040E-02	-.8894E-02	-.7233E-02	-.4650E-02	-.2029E-02	0.1083E-03
9	-.3108E-02	-.4644E-02	-.6533E-02	-.8443E-02	-.9714E-02	-.9596E-02	-.7848E-02	-.5091E-02	-.2270E-02	0.4823E-04

NAVY USERS MANUAL

		IZ		41		43	
IY							
1	1	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
3	3	0.7192E-03	0.1177E-02	0.7192E-03	0.1177E-02	0.7192E-03	0.1177E-02
5	5	0.1415E-02	0.2376E-02	0.1415E-02	0.2376E-02	0.1415E-02	0.2376E-02
7	7	0.1701E-02	0.2924E-02	0.1701E-02	0.2924E-02	0.1701E-02	0.2924E-02
9	9	0.1788E-02	0.3131E-02	0.1788E-02	0.3131E-02	0.1788E-02	0.3131E-02
11	11	0.1810E-02	0.3244E-02	0.1810E-02	0.3244E-02	0.1810E-02	0.3244E-02
13	13	0.1772E-02	0.3287E-02	0.1772E-02	0.3287E-02	0.1772E-02	0.3287E-02
15	15	0.1657E-02	0.3237E-02	0.1657E-02	0.3237E-02	0.1657E-02	0.3237E-02
17	17	0.1480E-02	0.3097E-02	0.1480E-02	0.3097E-02	0.1480E-02	0.3097E-02
19	19	0.1314E-02	0.2931E-02	0.1314E-02	0.2931E-02	0.1314E-02	0.2931E-02
21	21	0.1279E-02	0.2856E-02	0.1279E-02	0.2856E-02	0.1279E-02	0.2856E-02
23	23	0.1447E-02	0.2908E-02	0.1447E-02	0.2908E-02	0.1447E-02	0.2908E-02
25	25	0.1759E-02	0.3013E-02	0.1759E-02	0.3013E-02	0.1759E-02	0.3013E-02
27	27	0.2253E-02	0.3181E-02	0.2253E-02	0.3181E-02	0.2253E-02	0.3181E-02
29	29	0.2915E-02	0.3413E-02	0.2915E-02	0.3413E-02	0.2915E-02	0.3413E-02
31	31	0.3594E-02	0.3655E-02	0.3594E-02	0.3655E-02	0.3594E-02	0.3655E-02
33	33	0.4009E-02	0.3794E-02	0.4009E-02	0.3794E-02	0.4009E-02	0.3794E-02
35	35	0.3978E-02	0.3711E-02	0.3978E-02	0.3711E-02	0.3978E-02	0.3711E-02
37	37	0.3582E-02	0.3391E-02	0.3582E-02	0.3391E-02	0.3582E-02	0.3391E-02
39	39	0.3028E-02	0.2919E-02	0.3028E-02	0.2919E-02	0.3028E-02	0.2919E-02
41	41	0.2458E-02	0.2388E-02	0.2458E-02	0.2388E-02	0.2458E-02	0.2388E-02
43	43	0.1914E-02	0.1846E-02	0.1914E-02	0.1846E-02	0.1914E-02	0.1846E-02
45	45	0.1374E-02	0.1294E-02	0.1374E-02	0.1294E-02	0.1374E-02	0.1294E-02

```

STATION 12          ****
                    VOR-X
                    *YZ/UZ
                    *****

```

IZ	1	3	5	7	9	11	13	15	17	19
IY										
1	-1.812E-07	-4.519E+01	-4.589E+01	-3.181E+01	-1.848E+01	-9.569E+00	-6.677E+00	-1.082E+01	-2.428E+01	-5.129E+01
3	0.3900E+01	0.2001E+01	0.6392E-01	-1.066E-01	-1.286E-01	-1.161E-01	-1.256E-01	-1.1928E+01	-3.502E+01	-6.394E+01
5	0.2591E+01	0.2037E+01	0.1217E+01	0.2202E+00	-6.583E+00	-1.207E+01	-1.1570E+01	-1.1996E+01	-2.2623E+01	-3.3544E+01
7	0.1734E+01	0.1406E+01	0.9071E+00	0.1920E+00	-5.532E+00	-6.283E+00	-7.709E+00	-8.218E+00	-8.784E+00	-9.961E+00
9	0.6662E+00	0.3690E+00	-7.604E-01	-6.633E+00	-9.644E+00	-6.998E+00	-4.772E+00	-4.613E+00	-4.557E+00	-4.740E+00
11	-1.032E+01	-1.354E+01	-1.807E+01	-2.171E+01	-1.688E+01	-9.220E+00	-5.787E+00	-4.834E+00	-4.283E+00	-4.022E+00
13	-3.682E+01	-4.064E+01	-4.542E+01	-4.493E+01	-2.843E+01	-1.347E+01	-7.852E+00	-6.215E+00	-5.060E+00	-4.273E+00
15	-7.815E+01	-8.287E+01	-8.791E+01	-8.068E+01	-4.651E+01	-2.034E+01	-1.113E+01	-8.375E+00	-6.515E+00	-5.102E+00
17	-1.457E+02	-1.513E+02	-1.558E+02	-1.364E+02	-7.739E+01	-3.048E+01	-1.1574E+01	-1.117E+01	-8.216E+00	-6.087E+00
19	-2.596E+02	-2.650E+02	-2.662E+02	-2.241E+02	-1.153E+02	-4.521E+01	-2.213E+01	-1.476E+01	-1.101E+01	-6.921E+00
21	-4.577E+02	-4.600E+02	-4.514E+02	-3.659E+02	-1.795E+02	-6.727E+01	-3.136E+01	-1.972E+01	-1.253E+01	-7.758E+00
23	-8.431E+02	-8.329E+02	-7.957E+02	-6.175E+02	-2.866E+02	-1.016E+02	-4.460E+01	-2.607E+01	-1.507E+01	-8.040E+00
25	-1.791E+03	-1.735E+03	-1.603E+03	-1.168E+03	-4.869E+02	-1.456E+02	-4.719E+01	-1.400E+01	0.2435E+00	0.9351E+00
27	-3.438E+03	-3.338E+03	-3.082E+03	-2.215E+03	-9.180E+02	-2.827E+02	-9.657E+01	-2.738E+01	0.2086E+01	0.6621E+01
29	-2.421E+03	-2.483E+03	-2.510E+03	-2.109E+03	-1.034E+03	-3.563E+02	-1.306E+02	-3.796E+01	0.3086E+01	0.8483E+01
31	-8.326E+02	-8.414E+02	-8.359E+02	-7.032E+02	-3.587E+02	-1.315E+02	-5.569E+01	-2.809E+01	-8.861E+00	0.2314E+00
33	-3.391E+02	-3.386E+02	-3.301E+02	-2.690E+02	-1.326E+02	-4.849E+01	-2.152E+01	-1.256E+01	-7.147E+00	0.3713E+00
35	-1.941E+02	-1.931E+02	-1.871E+02	-1.509E+02	-7.326E+01	-2.621E+01	-1.1130E+01	-6.320E+00	-3.377E+00	-1.588E+00
37	-1.349E+02	-1.338E+02	-1.291E+02	-1.037E+02	-4.992E+01	-1.757E+01	-7.357E+00	-3.923E+00	-1.920E+00	-7.414E-01
39	-1.083E+02	-1.071E+02	-1.031E+02	-8.259E+01	-3.957E+01	-1.374E+01	-5.609E+00	-2.846E+00	-1.248E+00	-3.326E-01
41	-9.796E+01	-9.685E+01	-9.310E+01	-7.462E+01	-3.577E+01	-1.233E+01	-4.943E+00	-2.402E+00	-9.9334E-01	-1.057E-01
43	-9.854E+01	-9.744E+01	-9.376E+01	-7.543E+01	-3.635E+01	-1.254E+01	-4.985E+00	-2.359E+00	-8.290E-01	0.3175E-02
45	-1.086E+02	-1.075E+02	-1.036E+02	-8.381E+01	-4.071E+01	-1.411E+01	-5.613E+00	-2.629E+00	-8.713E-01	0.1267E-01
IY										
1	-9.656E+01	-1.623E+02	-2.423E+02	-3.181E+02	-3.620E+02	-3.495E+02	-2.767E+02	-1.699E+02	-6.543E+01	0.1714E+01
3	-1.100E+02	-1.743E+02	-2.510E+02	-3.235E+02	-3.652E+02	-3.512E+02	-2.785E+02	-1.737E+02	-7.165E+01	0.9137E+00
5	-4.852E+01	-6.651E+01	-8.979E+01	-1.159E+02	-1.364E+02	-1.390E+02	-1.172E+02	-7.839E+01	-3.629E+01	-2.845E-01
7	-1.209E+01	-1.544E+01	-2.024E+01	-2.613E+01	-3.135E+01	-3.290E+01	-2.884E+01	-2.035E+01	-1.048E+01	-1.583E+00
9	-5.310E+00	-6.429E+00	-8.180E+00	-1.042E+01	-1.249E+01	-1.322E+01	-1.184E+01	-8.724E+00	-4.978E+00	-1.505E+00
11	-4.136E+00	-4.688E+00	-5.731E+00	-7.137E+00	-8.429E+00	-8.872E+00	-8.020E+00	-6.130E+00	-3.867E+00	-1.764E+00
13	-3.932E+00	-4.081E+00	-4.706E+00	-5.661E+00	-6.529E+00	-6.762E+00	-6.104E+00	-4.804E+00	-3.321E+00	-1.987E+00
15	-4.209E+00	-3.896E+00	-4.129E+00	-4.718E+00	-5.260E+00	-5.308E+00	-4.733E+00	-3.794E+00	-2.822E+00	-2.010E+00
17	-4.615E+00	-3.796E+00	-3.578E+00	-3.775E+00	-4.011E+00	-3.890E+00	-3.375E+00	-2.711E+00	-2.111E+00	-1.661E+00
19	-4.790E+00	-3.481E+00	-2.828E+00	-2.633E+00	-2.625E+00	-2.388E+00	-1.946E+00	-1.537E+00	-1.237E+00	-1.045E+00
21	-4.636E+00	-2.645E+00	-1.429E+00	-8.858E-01	-1.128E+00	-1.178E+00	-7.816E-01	-4.872E-01	-2.983E-01	-1.855E-01
23	-3.326E+00	0.1768E-01	0.3202E+00	0.5563E+00	0.3612E+00	0.4722E-02	-3.651E-03	-8.488E-04	-3.242E-04	-1.767E-04
25	0.1226E+01	0.1682E+01	0.3087E+01	0.5144E+01	0.3009E+01	0.2646E+00	0.9599E-03	0.2033E-06	-1.670E-08	-2.509E-08
27	0.1284E+02	0.2088E+02	0.2101E+02	0.1873E+02	0.9341E+01	0.2073E+01	0.3686E-01	0.4244E-04	0.1202E-07	-1.026E-09
29	0.1203E+02	0.1350E+02	0.1322E+02	0.9200E+01	0.4109E+01	0.1207E+01	0.3869E-01	0.1353E+03	0.2046E-06	0.4109E-10
31	0.9838E+00	0.1315E+01	0.1261E+01	0.8938E+00	0.4012E+00	0.6738E-01	0.5687E-03	0.3234E-05	0.1622E-07	-8.802E-10
33	-1.604E+00	-3.918E-01	0.2020E-01	0.3599E-01	0.2511E-01	0.8575E-02	0.1202E-03	0.2831E-06	0.6099E-10	-1.395E-10
35	-5.553E-01	-7.878E-03	0.2390E-01	0.2999E-01	0.2431E-01	0.1229E-01	0.1765E-03	0.1964E-06	0.1489E-09	0.7488E-11
37	-9.975E-02	0.2069E-01	0.3170E-01	0.3148E-01	0.2462E-01	0.1374E-01	0.3971E-03	0.2782E-06	0.1096E-09	0.1088E-10
39	0.1364E-01	0.3318E-01	0.3745E-01	0.3380E-01	0.2600E-01	0.1548E-01	0.1122E-02	0.7232E-06	0.1679E-09	0.7721E-11
41	0.2982E-01	0.4423E-01	0.4457E-01	0.3832E-01	0.2920E-01	0.1793E-01	0.3065E-02	0.2995E-05	0.5192E-09	0.4226E-11

43 0.4412E-01 0.5699E-01 0.5475E-01 0.4595E-01 0.3494E-01 0.2247E-01 0.6953E-02 0.1911E-04 0.3021E-08 0.2178E-11
 45 0.6003E-01 0.7398E-01 0.6972E-01 0.5777E-01 0.4381E-01 0.2924E-01 0.1234E-01 0.9127E-04 0.1217E-07 -0.7170E-11

IZ 41 43

IY
 1 0.7704E+01 0.1223E+02
 3 0.6789E+01 0.1122E+02
 5 0.2758E+01 0.4957E+01
 7 0.5608E+00 0.1148E+01
 9 0.1375E+00 0.3780E+00
 11 -0.8349E-03 0.1474E+00
 13 -0.8960E-01 0.1910E-02
 15 -0.1383E+00 -0.8728E-01
 17 -0.1340E+00 -0.1092E+00
 19 -0.9210E-01 -0.8253E-01
 21 -0.1132E-01 -0.6754E-02
 23 -0.1030E-04 -0.5953E-05
 25 -0.2829E-08 -0.2445E-08
 27 -0.5111E-10 -0.2165E-10
 29 -0.4657E-10 -0.2015E-10
 31 -0.3194E-10 -0.1445E-10
 33 -0.1255E-10 -0.5835E-11
 35 0.1410E-11 0.1536E-11
 37 0.6284E-11 0.4709E-11
 39 0.5502E-11 0.4364E-11
 41 0.3227E-11 0.2691E-11
 43 0.1410E-11 0.1184E-11
 45 -0.1946E-11 -0.1057E-12

STATION 12 ***** CP/2 *****

IZ 1 3 5 7 9 11 13 15 17 19
 IY
 1 0.8152E-03 0.8220E-03 0.8268E-03 0.8293E-03 0.8300E-03 0.8293E-03 0.8272E-03 0.8234E-03 0.8169E-03 0.8062E-03
 3 0.8268E-03 0.8269E-03 0.8277E-03 0.8289E-03 0.8296E-03 0.8291E-03 0.8273E-03 0.8235E-03 0.8172E-03 0.8066E-03
 5 0.8302E-03 0.8301E-03 0.8299E-03 0.8298E-03 0.8298E-03 0.8292E-03 0.8274E-03 0.8239E-03 0.8177E-03 0.8072E-03
 7 0.8319E-03 0.8317E-03 0.8312E-03 0.8306E-03 0.8297E-03 0.8279E-03 0.8245E-03 0.8186E-03 0.8082E-03
 9 0.8333E-03 0.8332E-03 0.8329E-03 0.8325E-03 0.8319E-03 0.8308E-03 0.8290E-03 0.8257E-03 0.8199E-03 0.8098E-03
 11 0.8351E-03 0.8350E-03 0.8348E-03 0.8344E-03 0.8337E-03 0.8326E-03 0.8308E-03 0.8276E-03 0.8220E-03 0.8120E-03
 13 0.8380E-03 0.8378E-03 0.8376E-03 0.8372E-03 0.8366E-03 0.8355E-03 0.8337E-03 0.8307E-03 0.8252E-03 0.8154E-03
 15 0.8428E-03 0.8427E-03 0.8424E-03 0.8420E-03 0.8414E-03 0.8403E-03 0.8385E-03 0.8355E-03 0.8301E-03 0.8202E-03
 17 0.8506E-03 0.8504E-03 0.8501E-03 0.8496E-03 0.8489E-03 0.8478E-03 0.8459E-03 0.8371E-03 0.8267E-03
 19 0.8608E-03 0.8605E-03 0.8602E-03 0.8596E-03 0.8588E-03 0.8575E-03 0.8554E-03 0.8451E-03 0.8336E-03
 21 0.8660E-03 0.8657E-03 0.8653E-03 0.8646E-03 0.8635E-03 0.8619E-03 0.8593E-03 0.8549E-03 0.8469E-03 0.8322E-03
 23 0.8205E-03 0.8201E-03 0.8194E-03 0.8184E-03 0.8169E-03 0.8148E-03 0.8113E-03 0.8051E-03 0.7936E-03 0.7717E-03
 25 0.4602E-03 0.4595E-03 0.4586E-03 0.4573E-03 0.4553E-03 0.4524E-03 0.4473E-03 0.4375E-03 0.4172E-03 0.3741E-03
 27 -0.8661E-03 -0.8668E-03 -0.8679E-03 -0.8698E-03 -0.8737E-03 -0.8823E-03 -0.9009E-03 -0.9408E-03 -1.024E-02 -1.186E-02

```

29 -.1025E-02 -.1024E-02 -.1023E-02 -.1021E-02 -.1019E-02 -.1018E-02 -.1019E-02 -.1028E-02 -.1057E-02 -.1125E-02
31 0.1574E-03 0.1577E-03 0.1582E-03 0.1591E-03 0.1605E-03 0.1625E-03 0.1652E-03 0.1677E-03 0.1676E-03 0.1596E-03
33 0.1536E-03 0.1537E-03 0.1538E-03 0.1540E-03 0.1542E-03 0.1546E-03 0.1550E-03 0.1555E-03 0.1559E-03 0.1556E-03
35 0.8594E-04 0.8596E-04 0.8599E-04 0.8605E-04 0.8612E-04 0.8623E-04 0.8637E-04 0.8658E-04 0.8677E-04 0.8692E-04
37 0.4634E-04 0.4635E-04 0.4636E-04 0.4638E-04 0.4641E-04 0.4646E-04 0.4653E-04 0.4661E-04 0.4673E-04 0.4686E-04
39 0.1961E-04 0.1961E-04 0.1962E-04 0.1963E-04 0.1964E-04 0.1966E-04 0.1969E-04 0.1974E-04 0.1980E-04 0.1988E-04
41 -.1962E-05 -.1961E-05 -.1959E-05 -.1956E-05 -.1951E-05 -.1942E-05 -.1929E-05 -.1908E-05 -.1878E-05 -.1835E-05
43 -.2277E-04 -.2277E-04 -.2278E-04 -.2278E-04 -.2278E-04 -.2278E-04 -.2278E-04 -.2277E-04 -.2277E-04 -.2275E-04
45 -.4741E-04 -.4741E-04 -.4741E-04 -.4742E-04 -.4742E-04 -.4743E-04 -.4744E-04 -.4745E-04 -.4745E-04 -.4745E-04

```

```

IY 21 23 25 27 29 31 33 35 37 39
1 0.7881E-03 0.7573E-03 0.7054E-03 0.6243E-03 0.5140E-03 0.3918E-03 0.2833E-03 0.2011E-03 0.1426E-03 0.1011E-03
3 0.7886E-03 0.7577E-03 0.7058E-03 0.6245E-03 0.5140E-03 0.3917E-03 0.2831E-03 0.2010E-03 0.1425E-03 0.1010E-03
5 0.7893E-03 0.7584E-03 0.7063E-03 0.6248E-03 0.5140E-03 0.3915E-03 0.2829E-03 0.2007E-03 0.1423E-03 0.1009E-03
7 0.7904E-03 0.7594E-03 0.7071E-03 0.6252E-03 0.5140E-03 0.3911E-03 0.2824E-03 0.2004E-03 0.1421E-03 0.1007E-03
9 0.7920E-03 0.7609E-03 0.7082E-03 0.6256E-03 0.5138E-03 0.3905E-03 0.2816E-03 0.1997E-03 0.1416E-03 0.1005E-03
11 0.7943E-03 0.7630E-03 0.7096E-03 0.6260E-03 0.5131E-03 0.3891E-03 0.2802E-03 0.1986E-03 0.1409E-03 0.1000E-03
13 0.7977E-03 0.7659E-03 0.7114E-03 0.6261E-03 0.5113E-03 0.3863E-03 0.2775E-03 0.1967E-03 0.1397E-03 0.9926E-04
15 0.8022E-03 0.7695E-03 0.7131E-03 0.6248E-03 0.5069E-03 0.3804E-03 0.2724E-03 0.1933E-03 0.1376E-03 0.9796E-04
17 0.8076E-03 0.7729E-03 0.7129E-03 0.6193E-03 0.4963E-03 0.3681E-03 0.2625E-03 0.1870E-03 0.1340E-03 0.9570E-04
19 0.8119E-03 0.7725E-03 0.7052E-03 0.6021E-03 0.4710E-03 0.3419E-03 0.2430E-03 0.1753E-03 0.1274E-03 0.9183E-04
21 0.8048E-03 0.7553E-03 0.6722E-03 0.5505E-03 0.4081E-03 0.2853E-03 0.2044E-03 0.1535E-03 0.1137E-03 0.9652E-04
23 0.7301E-03 0.6551E-03 0.5341E-03 0.3756E-03 0.2323E-03 0.1546E-03 0.1278E-03 0.1137E-03 0.9652E-04 0.7642E-04
25 0.2843E-03 0.1160E-03 -.1327E-03 -.3434E-03 -.3318E-03 -.1536E-03 -.1521E-04 0.4738E-04 0.6527E-04 0.6160E-04
27 -.1469E-02 -.1862E-02 -.2192E-02 -.2119E-02 -.1442E-02 -.6589E-03 -.2151E-03 -.3900E-04 0.2435E-04 0.4143E-04
29 -.1252E-02 -.1433E-02 -.1590E-02 -.1539E-02 -.1159E-02 -.6559E-03 -.2816E-03 -.9203E-04 -.9872E-05 0.2101E-04
31 0.1340E-03 0.7935E-04 -.7598E-05 -.1073E-03 -.1774E-03 -.1816E-03 -.1238E-03 -.5930E-04 -.1438E-04 0.9720E-05
33 0.1534E-03 0.1468E-03 0.1322E-03 0.1058E-03 0.6738E-04 0.2726E-04 0.4708E-05 -.2857E-06 0.4133E-05 0.1051E-04
35 0.8684E-04 0.8608E-04 0.8376E-04 0.7839E-04 0.6795E-04 0.5224E-04 0.3713E-04 0.2560E-04 0.1819E-04 0.1458E-04
37 0.4697E-04 0.4694E-04 0.4655E-04 0.4529E-04 0.4221E-04 0.3647E-04 0.2993E-04 0.2378E-04 0.1800E-04 0.1341E-04
39 0.1997E-04 0.2005E-04 0.2003E-04 0.1973E-04 0.1871E-04 0.1638E-04 0.1357E-04 0.1114E-04 0.8502E-05 0.5961E-05
41 -.1781E-05 -.1719E-05 -.1671E-05 -.1707E-05 -.2025E-05 -.2965E-05 -.4155E-05 -.4643E-05 -.5019E-05 -.5356E-05
43 -.2273E-04 -.2268E-04 -.2261E-04 -.2251E-04 -.2243E-04 -.2252E-04 -.2255E-04 -.2163E-04 -.2014E-04 -.1836E-04
45 -.4741E-04 -.4730E-04 -.4707E-04 -.4661E-04 -.4582E-04 -.4463E-04 -.4285E-04 -.3982E-04 -.3580E-04 -.3141E-04

```

```

IY 41 43
1 0.7097E-04 0.4756E-04
3 0.7092E-04 0.4753E-04
5 0.7086E-04 0.4748E-04
7 0.7075E-04 0.4740E-04
9 0.7057E-04 0.4727E-04
11 0.7028E-04 0.4705E-04
13 0.6976E-04 0.4664E-04
15 0.6885E-04 0.4591E-04
17 0.6725E-04 0.4461E-04
19 0.6458E-04 0.4251E-04
21 0.6109E-04 0.4038E-04

```


23 0.5666E-04 0.3841E-04
 25 0.4964E-04 0.3532E-04
 27 0.3965E-04 0.3071E-04
 29 0.2815E-04 0.2490E-04
 31 0.1878E-04 0.1910E-04
 33 0.1433E-04 0.1475E-04
 35 0.1295E-04 0.1170E-04
 37 0.1023E-04 0.8127E-05
 39 0.3878E-05 0.2402E-05
 41 -.5558E-05 -.5583E-05
 43 -.1649E-04 -.1472E-04
 45 -.2711E-04 -.2336E-04
 FRAME 13 0.1831 0.0000 0.0000

WIDTH, HEIGHT, DEL Y, DEL Z: 13 0.20000E+00 0.11600E+00 0.00000E+00 0.00000E+00
 ADI ** ITER PMAX DELP RLSMAX PTEST RHS TEST LOG RES
 20 0.43569E-03 0.99009E-09 0.16059E-05 0.22724E-01 0.12331E+01 0.62
 30 0.43738E-03 0.74549E-09 0.16063E-05 0.17044E-01 0.92821E+00 0.49

ITER	RHO	LOG RES-F	DPF	PXF	LOG RES-S	DPS	PXS	TF	TS	ICONV
20	0.9731E+03	2.34	0.2292E-01	0.6439E+03	0.54	0.338E-08	0.5582E-03	0.5980E+01	0.7730E+02	0
40	0.9731E+03	1.57	0.7742E-02	0.6439E+03	-0.23	0.6332E-10	0.5582E-03	0.1006E+01	0.1301E+02	0
60	0.9731E+03	0.76	0.2645E-02	0.6439E+03	-1.04	0.3495E-11	0.5582E-03	0.1569E+00	0.2032E+01	1
67	0.5585E+01	1.14	0.3167E-01	0.6439E+03	-1.46	0.2738E-09	0.5582E-03	0.3781E+00	0.7673E+00	5

ADI ** ITER PMAX DELP RLSMAX PTEST RHS TEST LOG RES
 20 0.21093E-02 0.45789E-07 0.15813E-03 0.21708E+00 0.57914E+00 1.60

PRESSURE EQUATION CONVERGES

INTEGRATED PROPERTIES AT STATION 13

AREA 0.46393E-01/YZEROSQ
 MASS FLUX 0.44811E-01*UZ/R/YS
 MASS AVG. TOTAL PRESSURE COEFF/2 0.47737E+00
 MASS AVG. TOTAL PRESSURE COEFF/2
 WITHOUT VISCIOUS CORRECTION 0.47737E+00
 MASS AVG. STATIC PRESSURE COEFF/2 -0.41577E-10
 MASS AVG. STATIC PRESSURE COEFF/2
 WITHOUT VISCIOUS CORRECTION -0.41577E-10
 MASS AVG. MACH NUMBER 0.97447E-02
 AVERAGE VELOCITY/UZERO 0.96591E+00
 FRAME 14 0.2013 0.0000 0.0000

WIDTH, HEIGHT, DEL Y, DEL Z: 14 0.20000E+00 0.11600E+00 0.00000E+00 0.00000E+00
 ADI ** ITER PMAX DELP RLSMAX PTEST RHS TEST LOG RES

20 0.44126E-03 0.87041E-09 0.15315E-05 0.19725E-01 0.11367E+01 0.55
 25 0.44202E-03 0.71578E-09 0.15317E-05 0.16194E-01 0.93461E+00 0.48

ITER	RHO	LOG RES-F	DPF	DPF	DPF	LOG RES-S	DPF	PXS	TF	TS	ICONV
20	0.9731E+03	2.29	0.8591E-02	0.6494E+03	0.49	0.2938E-08	0.5366E-03	0.6093E+01	0.7845E+02	0	
40	0.9731E+03	1.52	0.2911E-02	0.6494E+03	-0.27	0.5789E-10	0.5366E-03	0.1047E+01	0.1348E+02	0	
60	0.9731E+03	0.73	0.9440E-03	0.6494E+03	-1.06	0.3372E-11	0.5366E-03	0.1703E+00	0.2193E+01	1	
67	0.5585E+01	0.87	0.3000E-01	0.6494E+03	-1.48	0.2598E-09	0.5366E-03	0.2356E+00	0.8289E+00	5	

ADI ** ITER PMAX DELP RHSMAX PTEST RHS TEST LOG RES
 20 0.18604E-02 0.39224E 7 0.13804E-03 0.21083E+00 0.56830E+00 1.59
 PRESSURE EQUATION CONVERGES

INTEGRATED PROPERTIES AT STATION 14

AREA 0.46393E-01/YZEROSQ
 MASS FLUX 0.44781E-01*UZ/R/YS
 MASS AVG. TOTAL PRESSURE COEFF/2 0.47690E+00
 MASS AVG. TOTAL PRESSURE COEFF/2
 WITHOUT VISCIOUS CORRECTION 0.47690E+00
 MASS AVG. STATIC PRESSURE COEFF/2 -0.70681E-10
 MASS AVG. STATIC PRESSURE COEFF/2
 WITHOUT VISCIOUS CORRECTION -0.70681E-10
 MASS AVG. MACH NUMBER 0.97394E-02
 AVERAGE VELOCITY/UZERO 0.96525E+00
 FRAME 15 0.2209 0.0000 0.0000

WIDTH, HEIGHT, DEL Y, DEL Z: 15 0.20000E+00 0.11600E+00 0.00000E+00 0.00000E+00
 ADI ** ITER PMAX DELP RHSMAX PTEST RHS TEST LOG RES
 20 0.44540E-03 0.74651E-09 0.14368E-05 0.16760E-01 0.10391E+01 0.48
 25 0.44606E-03 0.61278E-09 0.14370E-05 0.13738E-01 0.85285E+00 0.41

ITER	RHO	LOG RES-F	DPF	DPF	DPF	LOG RES-S	DPF	PXS	TF	TS	ICONV
20	0.9731E+03	2.24	0.3779E-01	0.6543E+03	0.45	0.2570E-08	0.5146E-03	0.6188E+01	0.7634E+02	0	
40	0.9731E+03	1.49	0.1323E-01	0.6543E+03	-0.30	0.5296E-10	0.5146E-03	0.1114E+01	0.1372E+02	0	
60	0.9731E+03	0.71	0.4390E-02	0.6543E+03	-1.08	0.3477E-11	0.5146E-03	0.1822E+00	0.2244E+01	1	
67	0.5585E+01	1.04	0.2840E-01	0.6543E+03	-1.51	0.2469E-09	0.5146E-03	0.3878E+00	0.8492E+00	5	

ADI ** ITER PMAX DELP RHSMAX PTEST RHS TEST LOG RES
 20 0.16412E-02 0.34379E-07 0.11992E-03 0.20948E+00 0.57336E+00 1.58
 PRESSURE EQUATION CONVERGES

INTEGRATED PROPERTIES AT STATION 15

```

AREA          0.46393E-01/YZEROSQ
MASS FLUX     0.44748E-01*UZ/R/YS
MASS AVG. TOTAL PRESSURE COEFF/2  0.47640E+00
MASS AVG. TOTAL PRESSURE COEFF/2
WITHOUT VISCOUS CORRECTION
MASS AVG. STATIC PRESSURE COEFF/2  0.47640E+00
MASS AVG. STATIC PRESSURE COEFF/2  -0.99785E-10
MASS AVG. STATIC PRESSURE COEFF/2
WITHOUT VISCOUS CORRECTION
MASS AVG. MACH NUMBER              -0.99785E-10
AVERAGE VELOCITY/UZERO            0.97337E-02
                                0.96455E+00
FRAME          16      0.2418      0.0000      0.0000

```

```

WIDTH, HEIGHT, DEL Y, DEL Z: 16 0.20000E+00 0.11600E+00 0.00000E+00 0.00000E+00
ADI ** ITER PMAX DFLP RHSMAX PTEST RHS TEST LOG RES
20 0.44892E-03 0.64167E-09 0.14128E-05 0.14293E-01 0.90835E+00 0.40

```

ITER	RHO	LOG RES-F	DPF	PXF	LOG RES-S	DPS	PXS	TF	TS	ICONV
20	0.9731E+03	2.20	0.6747E-02	0.6583E+03	0.41	0.2307E-08	0.4955E-03	0.6247E+01	0.7319E+02	0
40	0.9731E+03	1.46	0.2232E-02	0.6583E+03	-0.33	0.4861E-10	0.4956E-03	0.1160E+01	0.1355E+02	0
60	0.9731E+03	0.68	0.7129E-03	0.6583E+03	-1.11	0.2986E-11	0.4956E-03	0.1907E+00	0.2228E+01	1
67	0.5585E+01	0.80	0.2679E-01	0.6583E+03	-1.53	0.2344E-09	0.4956E-03	0.2528E+00	0.8444E+00	5

ADI ** ITER PMAX DFLP RHSMAX PTEST RHS TEST LOG RES

20 0.14396E-02 0.30191E-07 0.10516E-03 0.20972E+00 0.57420E+00 1.57

PRESSURE EQUATION CONVERGES

INTEGRATED PROPERTIES AT STATION 16

```

AREA          0.46393E-01/YZEROSQ
MASS FLUX     0.44713E-01*UZ/R/YS
MASS AVG. TOTAL PRESSURE COEFF/2  0.47586E+00
MASS AVG. TOTAL PRESSURE COEFF/2
WITHOUT VISCOUS CORRECTION
MASS AVG. STATIC PRESSURE COEFF/2  0.47586E+00
MASS AVG. STATIC PRESSURE COEFF/2  0.74838E-10
MASS AVG. STATIC PRESSURE COEFF/2
WITHOUT VISCOUS CORRECTION
MASS AVG. MACH NUMBER              0.74838E-10
AVERAGE VELOCITY/UZERO            0.97277E-02
                                0.96379E+00
FRAME          17      0.2642      0.0000      0.0000

```

```

WIDTH, HEIGHT, DEL Y, DEL Z: 17 0.20000E+00 0.11600E+00 0.00000E+00 0.00000E+00
ADI ** ITER PMAX DFLP RHSMAX PTEST RHS TEST LOG RES

```

20 0.45128E-03 0.56487E-09 0.13384E-05 0.12517E-01 0.84407E+00 0.30

ITER	RHO	LOG RES-F	DPF	PXF	LOG RES-S	DPS	PXS	TF	TS	ICONV
20	0.9731E+03	2.15	0.4213E-01	0.6617E+03	0.36	0.2039E-08	0.4770E-03	0.6096E+01	0.6904E+02	0
40	0.9731E+03	1.43	0.1474E-01	0.6617E+03	-0.36	0.4460E-10	0.4771E-03	0.1163E+01	0.1312E+02	0
60	0.9731E+03	0.75	0.4909E-02	0.6617E+03	-1.14	0.3889E-11	0.4771E-03	0.2395E+00	0.2173E+01	1
67	0.5585E+01	1.09	0.2522E-01	0.6617E+03	-1.56	0.2224E-09	0.4771E-03	0.5285E+00	0.8253E+00	5

ADI ** ITER PMAX DELP RHSMAX PTEST RHS TEST LOG RES
 20 0.12603E-02 0.26580E-07 0.92435E-04 0.21090E+00 0.57510E+00 1.56

PRESSURE EQUATION CONVERGES

INTEGRATED PROPERTIES AT STATION 17

AREA
 MASS FLUX
 MASS AVG. TOTAL PRESSURE COEFF/2
 MASS AVG. TOTAL PRESSURE COEFF/2
 WITHOUT VISCIOUS CORRECTION
 MASS AVG. STATIC PRESSURE COEFF/2
 MASS AVG. STATIC PRESSURE COEFF/2
 WITHOUT VISCIOUS CORRECTION
 MASS AVG. MACH NUMBER
 AVERAGE VELOCITY/UZERO
 0.0000 0.0000

0.46393E-01/YZEROSQ
 0.44675E-01*UZ/R/YS
 0.47530E+00
 0.47530E+00
 -0.12474E-10
 -0.12474E-10
 0.97213E-02
 0.96298E+00

FRAME 18 0.2881

WIDTH, HEIGHT, DEL Y, DEL Z: 18 0.20000E+00 0.11600E+00 0.00000E+00
 ADI ** ITER PMAX DELP RHSMAX PTEST RHS TEST LOG RES
 20 0.45311E-03 0.47296E-09 0.12748E-05 0.10438E-01 0.74200E+00 0.18

ITER	RHO	LOG RES-F	DPF	PXF	LOG RES-S	DPS	PXS	TF	TS	ICONV
20	0.9731E+03	2.12	0.4423E-01	0.6645E+03	0.33	0.1777E-08	0.4583E-03	0.6209E+01	0.6743E+02	0
40	0.9731E+03	1.40	0.1555E-01	0.6645E+03	-0.39	0.4007E-10	0.4583E-03	0.1191E+01	0.1294E+02	0
60	0.9731E+03	0.77	0.5174E-02	0.6645E+03	-1.17	0.4098E-11	0.4583E-03	0.2773E+00	0.2157E+01	1
67	0.5585E+01	1.12	0.2379E-01	0.6645E+03	-1.58	0.2120E-09	0.4583E-03	0.6204E+00	0.8208E+00	5

ADI ** ITER PMAX DELP RHSMAX PTEST RHS TEST LOG RES
 20 0.10976E-02 0.23422E-07 0.80620E-04 0.21340E+00 0.58104E+00 1.56

PRESSURE EQUATION CONVERGES

INTEGRATED PROPERTIES AT STATION 18

AREA
 MASS FLUX
 MASS AVG. TOTAL PRESSURE COEFF/2
 MASS AVG. TOTAL PRESSURE COEFF/2
 WITHOUT VISCOS CORRECTION
 MASS AVG. STATIC PRESSURE COEFF/2
 MASS AVG. STATIC PRESSURE COEFF/2
 WITHOUT VISCOS CORRECTION
 MASS AVG. MACH NUMBER
 AVERAGE VELOCITY/UZERO
 0.46393E-01/YZEROSQ
 0.44635E-01*UZ/R/YS
 0.47470E+00
 0.47470E+00
 0.27856E-09
 0.27856E-09
 0.97145E-02
 0.96211E+00
 FRAME 19 0.3137 0.0000 0.0000

WIDTH, HEIGHT, DEL Y, DEL Z: 19 0.20000E+00 0.11600E+00 0.00000E+00 0.00000E+00
 ADI ** ITER PMAX DELP RHSMAX PTEST RHS TEST LOG RES
 20 0.45435E-03 0.39169E-09 0.12418E-05 0.86208E-02 0.63081E+00 -0.01

ITER	RHO	LOG RES-F	DPF	PDF	PDF	LOG RES-S	DLS	PXS	TF	TS	ICONV
20	0.9731E+03	2.09	0.4665E-01	0.6666E+03	0.30	0.1636E-08	0.4394E-03	0.6019E+01	0.6717E+02	0	
40	0.9731E+03	1.37	0.1638E-01	0.6666E+03	-0.42	0.3692E-10	0.4394E-03	0.1154E+01	0.1287E+02	0	
60	0.9731E+03	0.79	0.5453E-02	0.6666E+03	-1.19	0.4319E-11	0.4394E-03	0.3047E+00	0.2164E+01	1	
67	0.5585E+01	1.14	0.2243E-01	0.6666E+03	-1.61	0.2022E-09	0.4394E-03	0.6848E+00	0.8251E+00	5	
ADI ** ITER	PMAX	DELP	RHSMAX	PTEST	RHS TEST	LOG RES					
20	0.95140E-03	0.20805E-07	0.69820E-04	0.21868E+00	0.59598E+00	1.56					

PRESSURE EQUATION CONVERGES

INTEGRATED PROPERTIES AT STATION 19

AREA
 MASS FLUX
 MASS AVG. TOTAL PRESSURE COEFF/2
 MASS AVG. TOTAL PRESSURE COEFF/2
 WITHOUT VISCOS CORRECTION
 MASS AVG. STATIC PRESSURE COEFF/2
 MASS AVG. STATIC PRESSURE COEFF/2
 WITHOUT VISCOS CORRECTION
 MASS AVG. MACH NUMBER
 AVERAGE VELOCITY/UZERO
 0.46393E-01/YZEROSQ
 0.44592E-01*UZ/R/YS
 0.47407E+00
 0.47407E+00
 0.33677E-09
 0.33677E-09
 0.97073E-02
 0.96118E+00
 FRAME 20 0.3411 0.0000 0.0000

WIDTH, HEIGHT, DEL Y, DEL Z: 20 0.20000E+00 0.11600E+00 0.00000E+00 0.00000E+00
 ADI ** ITER PMAX DELP RHSMAX PTEST RHS TEST LOG RES
 20 0.45497E-03 0.29003E-09 0.11933E-05 0.63747E-02 0.48610E+00 -0.36

ITER	RHO	LOG RES-F	DPF	PXF	LOG RES-S	DPS	PXS	TF	TS	ICONV
20	0.9731E+03	2.06	0.4750E-01	0.6681E+03	0.27	0.1502E-08	0.4205E-03	0.5522E+01	0.7030E+02	0
40	0.9731E+03	1.34	0.1667E-01	0.6681E+03	-0.45	0.3388E-10	0.4206E-03	0.1057E+01	0.1346E+02	0
60	0.9731E+03	0.80	0.5548E-02	0.6681E+03	-1.22	0.4395E-11	0.4206E-03	0.3039E+00	0.2280E+01	1
67	0.5585E+01	1.15	0.2125E-01	0.6681E+03	-1.64	0.1942E-09	0.4206E-03	0.6849E+00	0.8707E+00	5

ADI ** ITER PMAX DELP RSMAX PTEST RHS TEST LOG RES
 20 0.82822E-03 0.18515E-07 0.60138E-04 0.22356E+00 0.61576E+00 1.55

PRESSURE EQUATION CONVERGES

INTEGRATED PROPERTIES AT STATION 20

AREA
 MASS FLUX
 MASS AVG. TOTAL PRESSURE COEFF/2
 MASS AVG. TOTAL PRESSURE COEFF/2
 WITHOUT VISCIOUS CORRECTION
 MASS AVG. STATIC PRESSURE COEFF/2
 MASS AVG. STATIC PRESSURE COEFF/2
 WITHOUT VISCIOUS CORRECTION
 MASS AVG. MACH NUMBER
 AVERAGE VELOCITY/UZERO

0.46393E-01/YZEROSQ
0.44546E-01*UZ/R/YS
0.47340E+00
0.47340E+00
0.30767E-09
0.30767E-09
0.96996E-02
0.96018E+00

FRAME 21 0.3705 0.0000 0.0000

WIDTH, HEIGHT, DEL Y, DEL Z: 21 0.20000E+00 0.11600E+00 0.00000E+00 0.00000E+00

ADI ** ITER	PMAX	DELP	RHSMAX	PTEST	RHS TEST	LOG RES
20	0.45498E-03	0.19336E-09	0.11563E-05	0.42499E-02	0.33445E+00	-1.04

ITER	RHO	LOG RES-F	DPF	PXF	LOG RES-S	DPS	PXS	TF	TS	ICONV
20	0.9731E+03	2.03	0.4642E-01	0.6689E+03	0.24	0.1366E-08	0.4057E-03	0.4938E+01	0.7024E+02	0
40	0.9731E+03	1.32	0.1629E-01	0.6689E+03	-0.48	0.3194E-10	0.4058E-03	0.9623E+00	0.1348E+02	1
60	0.9731E+03	0.79	0.5418E-02	0.6689E+03	-1.24	0.4292E-11	0.4058E-03	0.2857E+00	0.2305E+01	1
67	0.5585E+01	1.14	0.2013E-01	0.6689E+03	-1.66	0.1867E-09	0.4058E-03	0.6441E+00	0.8823E+00	5

ADI ** ITER PMAX DELP RSMAX PTEST RHS TEST LOG RES
 20 0.71945E-03 0.16635E-07 0.55125E-04 0.23123E+00 0.60356E+00 1.15

PRESSURE EQUATION CONVERGES

INTEGRATED PROPERTIES AT STATION 21

AREA
 0.46393E-01/YZEROSQ

MASS FLUX
 MASS AVG. TOTAL PRESSURE COEFF/2 0.44497E-01*UZ/R/YS
 MASS AVG. TOTAL PRESSURE COEFF/2 0.47269E+00
 WITHOUT VISCIOUS CORRECTION
 MASS AVG. STATIC PRESSURE COEFF/2 0.47269E+00
 MASS AVG. STATIC PRESSURE COEFF/2 -0.99785E-10
 WITHOUT VISCIOUS CORRECTION
 MASS AVG. MACH NUMBER -0.99785E-10
 AVERAGE VELOCITY/UZERO 0.96914E-02
 0.95912E+00
 FRAME 22 0.4019 0.0000 0.0000

WIDTH, HEIGHT, DEL Y, DEL Z: 22 0.20000E+00 0.11600E+00 0.00000E+00 0.00000E+00
 ADI ** ITER PMAX DEXP RLSMAX PTEST RHS TEST LOG RES
 20 0.45441E-03 0.24240E-09 0.11243E-05 0.53344E-02 0.43121E+00 -0.22

ITER	RHO	LOG RES-F	DPF	DPF	LOG RES-S	DPS	PXS	TF	TS	ICONV
20	0.9731E+03	1.99	0.4434E-01	0.6692E+03	0.21	0.1308E-08	0.3943E-03	0.4504E+01	0.6026E+02	0
40	0.9731E+03	1.30	0.1554E-01	0.6692E+03	-0.51	0.3195E-10	0.3943E-03	0.9029E+00	0.1153E+02	1
60	0.9731E+03	0.77	0.5166E-02	0.6692E+03	-1.27	0.4092E-11	0.3943E-03	0.2680E+00	0.1990E+01	1
67	0.5585E+01	1.12	0.1892E-01	0.6692E+03	-1.69	0.1808E-09	0.3943E-03	0.6039E+00	0.7634E+00	5
ADI ** ITER	PMAX	DELP	RHSMAX	PTEST	RHS TEST	LOG RES				
20	0.64418E-03	0.14958E-07	0.55143E-04	0.23221E+00	0.54253E+00	1.55				

PRESSURE EQUATION CONVERGES

INTEGRATED PROPERTIES AT STATION 22

AREA
 MASS FLUX
 MASS AVG. TOTAL PRESSURE COEFF/2 0.46393E-01/YZEROSQ
 MASS AVG. TOTAL PRESSURE COEFF/2 0.44444E-01*UZ/R/YS
 WITHOUT VISCIOUS CORRECTION 0.47194E+00
 MASS AVG. STATIC PRESSURE COEFF/2 0.47194E+00
 MASS AVG. STATIC PRESSURE COEFF/2 -0.15799E-09
 WITHOUT VISCIOUS CORRECTION -0.15799E-09
 MASS AVG. MACH NUMBER 0.96828E-02
 AVERAGE VELOCITY/UZERO 0.95799E+00
 FRAME 23 0.4354 0.0000 0.0000

WIDTH, HEIGHT, DEL Y, DEL Z: 23 0.20000E+00 0.11600E+00 0.00000E+00 0.00000E+00
 ADI ** ITER PMAX DEXP RLSMAX PTEST RHS TEST LOG RES
 20 0.45326E-03 0.29780E-09 0.10671E-05 0.65702E-02 0.55815E+00 0.03

ITER	RHO	LOG RES-F	DPF	PXF	LOG RES-S	DPS	PXS	TF	TS	ICONV
20	0.9731E+03	1.96	0.4163E-01	0.6688E+03	0.18	0.1236E-08	0.3829E-03	0.4411E+01	0.5617E+02	0
40	0.9731E+03	1.27	0.1456E-01	0.6688E+03	-0.54	0.3177E-10	0.3829E-03	0.8911E+00	0.1074E+02	1
60	0.9731E+03	0.74	0.4830E-02	0.6688E+03	-1.30	0.3826E-11	0.3829E-03	0.2640E+00	0.1869E+01	1
67	0.5585E+01	1.09	0.1789E-01	0.6688E+03	-1.71	0.1755E-09	0.3829E-03	0.5930E+00	0.7183E+00	5

ADI ** ITER PMAX DELP RHM MAX PTEST RHS TEST LOG RES
 20 0.57265E-03 0.13448E-07 0.55110E-04 0.23483E+00 0.48802E+00 1.54
 PRESSURE EQUATION CONVERGES

INTEGRATED PROPERTIES AT STATION 23

AREA 0.46393E-01/YZEROSQ
 MASS FLUX 0.44388E-01*UZ/R/YS
 0.47115E+00
 MASS AVG. TOTAL PRESSURE COEFF/2
 MASS AVG. TOTAL PRESSURE COEFF/2
 WITHOUT VISCIOUS CORRECTION
 MASS AVG. STATIC PRESSURE COEFF/2
 MASS AVG. STATIC PRESSURE COEFF/2
 WITHOUT VISCIOUS CORRECTION
 MASS AVG. MACH NUMBER
 AVERAGE VELOCITY/UZERO
 0.0000 0.0000
 FRAME 24 0.4714

WIDTH, HEIGHT, DEL Y, DEL Z: 24 0.20000E+00 0.11600E+00 0.00000E+00 0.00000E+00
 ADI ** ITER PMAX DELP RHM MAX PTEST RHS TEST LOG RES
 20 0.45157E-03 0.35331E-09 0.10400E-05 0.78240E-02 0.67946E+00 0.18

ITER	RHO	LOG RES-F	DPF	PXF	LOG RES-S	DPS	PXS	TF	TS	ICONV
20	0.9731E+03	1.93	0.3879E-01	0.6678E+03	0.15	0.1150E-08	0.3707E-03	0.4545E+01	0.5497E+02	0
40	0.9731E+03	1.24	0.1354E-01	0.6678E+03	-0.57	0.3070E-10	0.3707E-03	0.9200E+00	0.1052E+02	1
60	0.9731E+03	0.71	0.4481E-02	0.6678E+03	-1.32	0.3549E-11	0.3707E-03	0.2720E+00	0.1848E+01	1
67	0.5585E+01	1.06	0.1699E-01	0.6678E+03	-1.74	0.1704E-09	0.3707E-03	0.6085E+00	0.7120E+00	5

ADI ** ITER PMAX DELP RHM MAX PTEST RHS TEST LOG RES
 20 0.50516E-03 0.12082E-07 0.55029E-04 0.23917E+00 0.43911E+00 1.54
 PRESSURE EQUATION CONVERGES

INTEGRATED PROPERTIES AT STATION 24

AREA 0.46393E-01/YZEROSQ
 MASS FLUX 0.44328E-01*UZ/R/YS
 MASS AVG. TOTAL PRESSURE COEFF/2 0.47031E+00

MASS AVG. TOTAL PRESSURE COEFF/2
 WITHOUT VISCIOUS CORRECTION 0.47031E+00
 MASS AVG. STATIC PRESSURE COEFF/2 0.74838E-10
 MASS AVG. STATIC PRESSURE COEFF/2
 WITHOUT VISCIOUS CORRECTION 0.74838E-10
 MASS AVG. MACH NUMBER 0.96639E-02
 AVERAGE VELOCITY/UZERO 0.95550E+00
 FRAME 25 0.5098 0.0000 0.0000

WIDTH, HEIGHT, DEL Y, DEL Z: 25 0.20000E+00 0.11600E+00 0.00000E+00 0.00000E+00
 ADI ** ITER PMAX DELP RLSMAX PTEST RHS TEST LOG RES
 20 0.44938E-03 0.45020E-09 0.10176E-05 0.10018E-01 0.88480E+00 0.29

ITER	RHO	LOG RES-F	DPF	PXF	LOG RES-S	DPS	PXS	TF	TS	ICONV
20	0.9731E+03	1.90	0.3610E-01	0.6662E+03	0.12	0.1092E-08	0.3578E-03	0.4260E+01	0.5776E+02	0
40	0.9731E+03	1.21	0.1258E-01	0.6662E+03	-0.60	0.2957E-10	0.3578E-03	0.8557E+00	0.1099E+02	1
60	0.9731E+03	0.68	0.4155E-02	0.6662E+03	-1.35	0.3291E-11	0.3578E-03	0.2526E+00	0.1943E+01	1
67	0.5585E+01	1.02	0.1624E-01	0.6662E+03	-1.76	0.1651E-09	0.3578E-03	0.5629E+00	0.7570E+00	5
ADI ** ITER	PMAX	DELP	RHSMAX	PTEST	RHS TEST	LOG RES				
20	0.44617E-03	0.10857E-07	0.54900E-04	0.24333E+00	0.39551E+00	1.54				

PRESSURE EQUATION CONVERGES

INTEGRATED PROPERTIES AT STATION 25

AREA 0.46393E-01/YZEROSQ
 MASS FLUX 0.44265E-01*UZ/R/YS
 MASS AVG. TOTAL PRESSURE COEFF/2 0.46943E+00
 MASS AVG. TOTAL PRESSURE COEFF/2
 WITHOUT VISCIOUS CORRECTION 0.46943E+00
 MASS AVG. STATIC PRESSURE COEFF/2 -0.36172E-09
 MASS AVG. STATIC PRESSURE COEFF/2
 WITHOUT VISCIOUS CORRECTION -0.36172E-09
 MASS AVG. MACH NUMBER 0.96536E-02
 AVERAGE VELOCITY/UZERO 0.95413E+00
 FRAME 26 0.5509 0.0000 0.0000

WIDTH, HEIGHT, DEL Y, DEL Z: 26 0.20000E+00 0.11600E+00 0.00000E+00 0.00000E+00
 ADI ** ITER PMAX DELP RLSMAX PTEST RHS TEST LOG RES
 20 0.44672E-03 0.53993E-09 0.98486E-06 0.12087E-01 0.10965E+01 0.37
 30 0.44564E-03 0.42333E-09 0.98487E-06 0.94993E-02 0.85966E+00 0.25

ITER	RHO	LOG RES-F	DPF	PXF	LOG RES-S	DPS	PXS	TF	TS	ICONV
20	0.9731E+03	1.87	0.1255E-01	0.6638E+03	0.09	0.1021E-08	0.3443E-03	0.4195E+01	0.6403E+02	0
40	0.9731E+03	1.15	0.4186E-02	0.6638E+03	-0.63	0.2818E-10	0.3443E-03	0.7986E+00	0.1219E+02	1
60	0.9731E+03	0.40	0.1409E-02	0.6638E+03	-1.38	0.2095E-11	0.3443E-03	0.1442E+00	0.2200E+01	1
67	0.5585E+01	1.04	0.2123E-01	0.6638E+03	-1.78	0.1588E-09	0.3443E-03	0.6199E+00	0.8626E+00	5

ADI ** ITER PMAX DELP RHSMAX PTEST LOG RES

20 0.38973E-03 0.98004E-08 0.54699E-04 0.25146E+00 0.35834E+00 1.53

PRESSURE EQUATION CONVERGES

INTEGRATED PROPERTIES AT STATION 26

AREA 0.46393E-01/YZEROSQ

MASS FLUX 0.44197E-01*UZ/R/YS

MASS AVG. TOTAL PRESSURE COEFF/2 0.46849E+00

MASS AVG. TOTAL PRESSURE COEFF/2 WITHOUT VISCOS CORRECTION 0.46849E+00

MASS AVG. STATIC PRESSURE COEFF/2 0.10394E-09

MASS AVG. STATIC PRESSURE COEFF/2 WITHOUT VISCOS CORRECTION 0.10394E-09

MASS AVG. MACH NUMBER 0.96427E-02

AVERAGE VELOCITY/UZERO 0.95267E+00

FRAME 27 0.5950 0.0000 0.0000

WIDTH, HEIGHT, DEL Y, DEL Z: 27 0.20000E+00 0.11600E+00 0.00000E+00 0.00000E+00

ADI ** ITER PMAX DELP RHSMAX PTEST LOG RES

20 0.44279E-03 0.58618E-09 0.96151E-06 0.13238E-01 0.12193E+01 0.40

35 0.44115E-03 0.40054E-09 0.96150E-06 0.90796E-02 0.83317E+00 0.22

ITER	RHO	LOG RES-F	DPF	PXF	LOG RES-S	DPS	PXS	TF	TS	ICONV
20	0.9731E+03	1.83	0.8666E-02	0.6607E+03	0.05	0.9499E-09	0.3307E-03	0.3596E+01	0.5621E+02	0
40	0.9731E+03	1.11	0.2947E-02	0.6607E+03	-0.67	0.2692E-10	0.3307E-03	0.6875E+00	0.1074E+02	1
60	0.9731E+03	0.38	0.9907E-03	0.6607E+03	-1.40	0.2030E-11	0.3307E-03	0.1281E+00	0.2001E+01	1
67	0.5585E+01	1.04	0.2141E-01	0.6607E+03	-1.80	0.1537E-09	0.3307E-03	0.5854E+00	0.7854E+00	5

ADI ** ITER PMAX DELP RHSMAX PTEST LOG RES

20 0.33913E-03 0.88450E-08 0.54447E-04 0.26082E+00 0.32491E+00 1.52

PRESSURE EQUATION CONVERGES

INTEGRATED PROPERTIES AT STATION 27

AREA 0.46393E-01/YZEROSQ

MASS FLUX 0.44125E-01*UZ/R/YS

MASS AVG. TOTAL PRESSURE COEFF/2 0.46750E+00

MASS AVG. TOTAL PRESSURE COEFF/2
 WITHOUT VISCOS CORRECTION 0.46750E+00
 MASS AVG. STATIC PRESSURE COEFF/2
 -0.33262E-09
 MASS AVG. STATIC PRESSURE COEFF/2
 WITHOUT VISCOS CORRECTION
 -0.33262E-09
 MASS AVG. MACH NUMBER
 0.96311E-02
 AVERAGE VELOCITY/UZERO
 0.95112F+00

FRAME 28 0.6421 0.0000 0.0000

WIDTH, HEIGHT, DEL Y, DEL Z: 28 0.20000E+00 0.11600E+00 0.00000E+00 0.00000E+00
 ADI ** ITER PMAX DELP RHSMAX PTEST RHS TEST LOG RES
 20 0.43827E-03 0.59942E-09 0.93314E-06 0.13676E-01 0.12847E+01 0.41
 35 0.43660E-03 0.41190E-09 0.93309E-06 0.94342E-02 0.88286E+00 0.24

ITER	RHO	LOG RES-F	DPF	PDF	PXF	LOG RES-S	DPS	PXS	TF	TS	ICONV
20	0.9731E+03	1.80	0.4225E-02	0.6572E+03	0.02	0.9104E-09	0.3191E-03	0.3436E+01	0.4440E+02	0	
40	0.9731E+03	1.09	0.1468E-02	0.6572E+03	-0.69	0.2548E-10	0.3192E-03	0.6594E+00	0.8514E+01	1	
60	0.9731E+03	0.36	0.4741E-03	0.6572E+03	-1.12	0.1982E-11	0.3192E-03	0.1241E+00	0.1602E+01	1	
62	0.5585E+01	1.12	0.2601E-01	0.5572E+03	-1.64	0.2287E-09	0.3192E-03	0.7087E+00	0.9610E+00	5	
ADI ** ITER	PMAX	DELP	RHSMAX	PTEST	RHS TEST	LOG RES					
20	0.29258E-03	0.79493E-08	0.54156E-04	0.27169E+00	0.29357E+00	1.52					

PRESSURE EQUATION CONVERGES

INTEGRATED PROPERTIES AT STATION 28

AREA
 MASS FLUX 0.46393E-01/YZEROSQ
 0.44049E-01*U2/R/YS
 0.46646E+00
 MASS AVG. TOTAL PRESSURE COEFF/2
 MASS AVG. TOTAL PRESSURE COEFF/2
 WITHOUT VISCOS CORRECTION 0.46646E+00
 MASS AVG. STATIC PRESSURE COEFF/2
 MASS AVG. STATIC PRESSURE COEFF/2
 WITHOUT VISCOS CORRECTION 0.45734E-10
 MASS AVG. MACH NUMBER
 0.96189E-02
 AVERAGE VELOCITY/UZERO 0.94947E+00

FRAME 29 0.6925 0.0000 0.0000

WIDTH, HEIGHT, DEL Y, DEL Z: 29 0.20000E+00 0.11600E+00 0.00000E+00 0.00000E+00
 ADI ** ITER PMAX DELP RHSMAX PTEST RHS TEST LOG RES
 20 0.43373E-03 0.60730E-09 0.89147E-06 0.14002E-01 0.13625E+01 0.42
 40 0.43158E-03 0.36316E-09 0.89146E-06 0.84146E-02 0.81484E+00 0.18

ITER	RHO	LOG RES-F	DPF	PXF	LOG RES-S	DPS	PXS	TF	TS	ICONV
20	0.9731E+03	1.76	0.1726E-01	0.6531E+03	-0.02	0.9394E-09	0.3070E-03	0.3577E+01	0.4853E+02	0
40	0.9731E+03	1.06	0.5867E-02	0.6531E+03	-0.72	0.2487E-10	0.3071E-03	0.7084E+00	0.9504E+01	1
60	0.9731E+03	0.34	0.1957E-02	0.6531E+03	-1.44	0.1906E-11	0.3071E-03	0.1371E+00	0.1820E+01	1
67	0.5585E+01	1.09	0.2447E-01	0.6531E+03	-1.85	0.1440E-09	0.3071E-03	0.7693E+00	0.7161E+00	5

ADI ** ITER PMAX DELP RHSMAX PTEST RHS TEST LOG RES
 20 0.24982E-03 0.7253E-08 0.53819E-04 0.29036E+00 0.26956E+00 1.51

PRESSURE EQUATION CONVERGES

INTEGRATED PROPERTIES AT STATION 29

AREA 0.46393E-01/YZEROSQ
 MASS FLUX 0.43968E-01*UZ/R/YS
 MASS AVG. TOTAL PRESSURE COEFF/2 0.46537E+00
 MASS AVG. TOTAL PRESSURE COEFF/2
 WITHOUT VISCOS CORRECTION
 MASS AVG. STATIC PRESSURE COEFF/2 0.46537E+00
 MASS AVG. STATIC PRESSURE COEFF/2 0.13305E-09
 MASS AVG. STATIC PRESSURE COEFF/2
 WITHOUT VISCOS CORRECTION
 MASS AVG. MACH NUMBER 0.13305E-09
 AVERAGE VELOCITY/UZERO 0.96060E-02
 0.94772E+00

FRAME 30 0.7464 0.0000 0.0000

WIDTH, HEIGHT, DEL Y, DEL Z: 30 0.20000E+00 0.11600E+00 0.00000E+00 0.00000E+00
 ADI ** ITER PMAX DELP RHSMAX PTEST RHS TEST LOG RES
 20 0.42874E-03 0.61068E-09 0.88200E-06 0.14244E-01 0.13848E+01 0.43
 40 0.42657E-03 0.36727E-09 0.88194E-06 0.86099E-02 0.83287E+00 0.19

ITER	RHO	LOG RES-F	DPF	PXF	LOG RES-S	DPS	PXS	TF	TS	ICONV
20	0.9731E+03	1.73	0.1827E-02	0.6486E+03	-0.05	0.8800E-09	0.2945E-03	0.3058E+01	0.4106E+02	0
40	0.9731E+03	1.04	0.5114E-03	0.6486E+03	-0.74	0.2298E-10	0.2945E-03	0.6212E+00	0.6334E+01	1
60	0.9731E+03	0.32	0.1579E-03	0.6486E+03	-1.46	0.1875E-11	0.2945E-03	0.1186E+00	0.1590E+01	1
62	0.5585E+01	1.08	0.2430E-01	0.6486E+03	-1.68	0.2150E-09	0.2945E-03	0.6907E+00	0.9524E+00	5

ADI ** ITER PMAX DELP RHSMAX PTEST RHS TFST LOG RES
 20 0.22531E-03 0.66102E-08 0.53448E-04 0.29338E+00 0.24735E+00 1.51

PRESSURE EQUATION CONVERGES

INTEGRATED PROPERTIES AT STATION 30

AREA 0.46393E-01/YZEROSQ
 MASS FLUX 0.43881E-01*UZ/R/YS

```

MASS AVG. TOTAL PRESSURE COEFF/2      0.46421E+00
MASS AVG. TOTAL PRESSURE COEFF/2
WITHOUT VISCOUS CORRECTION
MASS AVG. STATIC PRESSURE COEFF/2      0.46421E+00
MASS AVG. STATIC PRESSURE COEFF/2
WITHOUT VISCOUS CORRECTION
MASS AVG. MACH NUMBER
AVERAGE VELOCITY/UZERO
FRAME      31      0.8041      0.0000      0.0000
WIDTH, HEIGHT, DEL Y, DEL Z:  31  0.20000E+00  0.11600E+00  0.00000E+00  0.00000E+00
ADI ** ITER  PMAX      DELP      RHSMAX      PTEST      RHS TEST      LOG RES
20 0.42372E-03 0.61706E-09 0.86513E-06 0.14563E-01 0.14265E+01      0.43
40 0.42152E-03 0.37303E-09 0.86505E-06 0.88496E-02 0.86244E+00      0.19

```

```

ITER  RHO      LOG RES-F      DPF      PXF      LOG RES-S      DPS      PXS      TF      TS      ICONV
20 0.9731E-03  1.70      0.2332E-02  0.6437E+03  -0.08      0.1048E-08  0.2816E-03  0.3037E+01  0.3610E+02  0
40 0.9731E-03  1.01      0.8172E-03  0.6437E+03  -0.77      0.2075E-10  0.2816E-03  0.6255E+00  0.7428E+01  1
60 0.9731E-03  0.29      0.2625E-03  0.6437E+03  -1.48      0.1812E-11  0.2816E-03  0.1202E+00  0.1427E+01  1
62 0.5585E-01  1.05      0.2246E-01  0.6437E+03  -1.71      0.2069E-09  0.2816E-03  0.6795E+00  0.8542E+00  5
ADI ** ITER  PMAX      DELP      RHSMAX      PTEST      RHS TEST      LOG RES
15 0.21110E-03 0.20249E-07 0.53043E-04 0.95920E+00 0.76348E+00      1.57
PRESSURE EQUATION CONVERGES

```

INTEGRATED PROPERTIES AT STATION 31

```

AREA
MASS FLUX
MASS AVG. TOTAL PRESSURE COEFF/2      0.46393E-01/YZEROSQ
MASS AVG. TOTAL PRESSURE COEFF/2
WITHOUT VISCOUS CORRECTION
MASS AVG. STATIC PRESSURE COEFF/2      0.43790E-01*UZ/R/YS
MASS AVG. STATIC PRESSURE COEFF/2
WITHOUT VISCOUS CORRECTION
MASS AVG. MACH NUMBER
AVERAGE VELOCITY/UZERO
FRAME      32      0.8658      0.0000      0.0000
WIDTH, HEIGHT, DEL Y, DEL Z:  32  0.20000E+00  0.11600E+00  0.00000E+00  0.00000E+00
ADI ** ITER  PMAX      DELP      RHSMAX      PTEST      RHS TEST      LOG RES
20 0.41861E-03 0.63408E-09 0.84065E-06 0.15147E-01 0.15085E+01      0.44
40 0.41634E-03 0.38458E-09 0.84055E-06 0.92371E-02 0.91506E+00      0.21

```

ITER	RHO	LOG RES-F	DPF	DPF	LOG RES-S	DPS	PXS	TF	TS	ICONV
20	0.9731E+03	1.67	0.4313E-02	0.6383E+03	-0.07	0.7889E-09	0.2702E-03	0.3314E+01	0.4742E+02	0
40	0.9731E+03	0.98	0.1521E-02	0.6383E+03	-0.79	0.1907E-10	0.2702E-03	0.6888E+00	0.8906E+01	1
60	0.9731E+03	0.27	0.4971E-03	0.6383E+03	-1.51	0.1761E-11	0.2702E-03	0.1333E+00	0.1723E+01	1
67	0.5585E+01	0.76	0.1182E-01	0.6383E+03	-1.91	0.1322E-09	0.2702E-03	0.4148E+00	0.6810E+00	5

ADI ** ITER PMAX DPLP RHSMAX PTEST RHS TEST LOG RES
 15 0.20139E-03 0.17624E-07 0.52602E-04 0.87513E+00 0.67010E+00 1.56
 PRESSURE EQUATION CONVERGES

INTEGRATED PROPERTIES AT STATION 32

AREA
 MASS FLUX
 MASS AVG. TOTAL PRESSURE COEFF/2
 MASS AVG. TOTAL PRESSURE COEFF/2
 WITHOUT VISCOS CORRECTION
 MASS AVG. STATIC PRESSURE COEFF/2
 MASS AVG. STATIC PRESSURE COEFF/2
 WITHOUT VISCOS CORRECTION
 MASS AVG. MACH NUMBER
 AVERAGE VELOCITY/UZERO
 FRAME 33 0.9319 0.0000 0.0000

0.46393E-01/YZEROSQ
 0.43693E-01*UZ/R/YS
 0.46171E+00
 0.46171E+00
 -0.70681E-10
 -0.70681E-10
 0.95626E-02
 0.94180E+00

WIDTH, HEIGHT, DEL Y, DEL Z: 33 0.20000E+00 0.11600E+00 0.00000E+00 0.00000E+00
 ADI ** ITER PMAX DPLP RHSMAX PTEST RHS TEST LOG RES
 20 0.41333E-03 0.65567E-09 0.82210E-06 0.15887E-01 0.15975E+01 0.46
 40 0.41097E-03 0.39918E-09 0.82200E-06 0.97131E-02 0.97124E+00 0.22
 45 0.41056E-03 0.34502E-09 0.82197E-06 0.84036E-02 0.83949E+00 0.16

ITER	RHO	LOG RES-F	DPF	DPF	LOG RES-S	DPS	PXS	TF	TS	ICONV
20	0.9731E+03	1.64	0.1395E-01	0.6324E+03	-0.03	0.1007E-08	0.2610E-03	0.3002E+01	0.4167E+02	0
40	0.9731E+03	0.96	0.4735E-02	0.6324E+03	-0.82	0.1850E-10	0.2610E-03	0.6220E+00	0.6681E+01	1
60	0.9731E+03	0.25	0.1577E-02	0.6324E+03	-1.53	0.1701E-11	0.2610E-03	0.1223E+00	0.1302E+01	1
62	0.5585E+01	0.94	0.1866E-01	0.6324E+03	-1.75	0.1922E-09	0.2610E-03	0.6029E+00	0.7780E+00	5

ADI ** ITER PMAX DPLP RHSMAX PTEST RHS TEST LOG RES
 15 0.19030E-03 0.15330E-07 0.52116E-04 0.80556E+00 0.58829E+00 1.55
 PRESSURE EQUATION CONVERGES

PLOT FILE WRITTEN FOR STATION JX= 33

```

CENTERLINE LOCATION ( 0.0000E+00 , 0.0000E+00 , 0.93187E+00 ) /ZERO
CENTERLINE ARC LENGTH= 0.93187E+00/YZERO
STEP SIZE 0.66057E-01

```

33-TH STATION AT 0.93187E+00

[illegible][illegible]

```

45 0.1599E+00 0.1599E+00 0.1599E+00 0.1599E+00 0.1599E+00 0.1599E+00 0.1599E+00 0.1599E+00 0.1599E+00
IX
1 0.0000E+00 0.0000E+00 0.0000E+00 0.0000E+00 0.0000E+00 0.0000E+00 0.0000E+00 0.0000E+00 0.0000E+00
3 0.9940E-04 0.9940E-04 0.9940E-04 0.9940E-04 0.9940E-04 0.9940E-04 0.9940E-04 0.9940E-04 0.9940E-04
5 0.2475E-03 0.2475E-03 0.2475E-03 0.2475E-03 0.2475E-03 0.2475E-03 0.2475E-03 0.2475E-03 0.2475E-03
7 0.4674E-03 0.4674E-03 0.4674E-03 0.4674E-03 0.4674E-03 0.4674E-03 0.4674E-03 0.4674E-03 0.4674E-03
9 0.7922E-03 0.7922E-03 0.7922E-03 0.7922E-03 0.7922E-03 0.7922E-03 0.7922E-03 0.7922E-03 0.7922E-03
11 0.1269E-02 0.1269E-02 0.1269E-02 0.1269E-02 0.1269E-02 0.1269E-02 0.1269E-02 0.1269E-02 0.1269E-02
13 0.1961E-02 0.1961E-02 0.1961E-02 0.1961E-02 0.1961E-02 0.1961E-02 0.1961E-02 0.1961E-02 0.1961E-02
15 0.2955E-02 0.2955E-02 0.2955E-02 0.2955E-02 0.2955E-02 0.2955E-02 0.2955E-02 0.2955E-02 0.2955E-02
17 0.4365E-02 0.4365E-02 0.4365E-02 0.4365E-02 0.4365E-02 0.4365E-02 0.4365E-02 0.4365E-02 0.4365E-02
19 0.6334E-02 0.6334E-02 0.6334E-02 0.6334E-02 0.6334E-02 0.6334E-02 0.6334E-02 0.6334E-02 0.6334E-02
21 0.9039E-02 0.9039E-02 0.9039E-02 0.9039E-02 0.9039E-02 0.9039E-02 0.9039E-02 0.9039E-02 0.9039E-02
23 0.1269E-01 0.1269E-01 0.1269E-01 0.1269E-01 0.1269E-01 0.1269E-01 0.1269E-01 0.1269E-01 0.1269E-01
25 0.1751E-01 0.1751E-01 0.1751E-01 0.1751E-01 0.1751E-01 0.1751E-01 0.1751E-01 0.1751E-01 0.1751E-01
27 0.2376E-01 0.2376E-01 0.2376E-01 0.2376E-01 0.2376E-01 0.2376E-01 0.2376E-01 0.2376E-01 0.2376E-01
29 0.3166E-01 0.3166E-01 0.3166E-01 0.3166E-01 0.3166E-01 0.3166E-01 0.3166E-01 0.3166E-01 0.3166E-01
31 0.4143E-01 0.4143E-01 0.4143E-01 0.4143E-01 0.4143E-01 0.4143E-01 0.4143E-01 0.4143E-01 0.4143E-01
33 0.5320E-01 0.5320E-01 0.5320E-01 0.5320E-01 0.5320E-01 0.5320E-01 0.5320E-01 0.5320E-01 0.5320E-01
35 0.6703E-01 0.6703E-01 0.6703E-01 0.6703E-01 0.6703E-01 0.6703E-01 0.6703E-01 0.6703E-01 0.6703E-01
37 0.8284E-01 0.8284E-01 0.8284E-01 0.8284E-01 0.8284E-01 0.8284E-01 0.8284E-01 0.8284E-01 0.8284E-01
39 0.1004E+00 0.1004E+00 0.1004E+00 0.1004E+00 0.1004E+00 0.1004E+00 0.1004E+00 0.1004E+00 0.1004E+00
41 0.1195E+00 0.1195E+00 0.1195E+00 0.1195E+00 0.1195E+00 0.1195E+00 0.1195E+00 0.1195E+00 0.1195E+00
43 0.1395E+00 0.1395E+00 0.1395E+00 0.1395E+00 0.1395E+00 0.1395E+00 0.1395E+00 0.1395E+00 0.1395E+00
45 0.1599E+00 0.1599E+00 0.1599E+00 0.1599E+00 0.1599E+00 0.1599E+00 0.1599E+00 0.1599E+00 0.1599E+00

```

```

IX
1 0.0000E+00 0.0000E+00
3 0.9940E-04 0.9940E-04
5 0.2475E-03 0.2475E-03
7 0.4674E-03 0.4674E-03
9 0.7922E-03 0.7922E-03
11 0.1269E-02 0.1269E-02
13 0.1961E-02 0.1961E-02
15 0.2955E-02 0.2955E-02
17 0.4365E-02 0.4365E-02
19 0.6334E-02 0.6334E-02
21 0.9039E-02 0.9039E-02
23 0.1269E-01 0.1269E-01
25 0.1751E-01 0.1751E-01
27 0.2376E-01 0.2376E-01
29 0.3166E-01 0.3166E-01
31 0.4143E-01 0.4143E-01
33 0.5320E-01 0.5320E-01
35 0.6703E-01 0.6703E-01
37 0.8284E-01 0.8284E-01
39 0.1004E+00 0.1004E+00
41 0.1195E+00 0.1195E+00
43 0.1395E+00 0.1395E+00
45 0.1599E+00 0.1599E+00

```


NAVY USERS MANUAL

[illegible]

	I ²	41	43							
25	0.3560E-02	0.5085E-02	0.7155E-02	0.9915E-02	0.1352E-01	0.1815E-01	0.2394E-01	0.3104E-01	0.3954E-01	0.4946E-01
27	0.3560E-02	0.5085E-02	0.7155E-02	0.9915E-02	0.1352E-01	0.1815E-01	0.2394E-01	0.3104E-01	0.3954E-01	0.4946E-01
29	0.3560E-02	0.5085E-02	0.7155E-02	0.9915E-02	0.1352E-01	0.1815E-01	0.2394E-01	0.3104E-01	0.3954E-01	0.4946E-01
31	0.3560E-02	0.5085E-02	0.7155E-02	0.9915E-02	0.1352E-01	0.1815E-01	0.2394E-01	0.3104E-01	0.3954E-01	0.4946E-01
33	0.3560E-02	0.5085E-02	0.7155E-02	0.9915E-02	0.1352E-01	0.1815E-01	0.2394E-01	0.3104E-01	0.3954E-01	0.4946E-01
35	0.3560E-02	0.5085E-02	0.7155E-02	0.9915E-02	0.1352E-01	0.1815E-01	0.2394E-01	0.3104E-01	0.3954E-01	0.4946E-01
37	0.3560E-02	0.5085E-02	0.7155E-02	0.9915E-02	0.1352E-01	0.1815E-01	0.2394E-01	0.3104E-01	0.3954E-01	0.4946E-01
39	0.3560E-02	0.5085E-02	0.7155E-02	0.9915E-02	0.1352E-01	0.1815E-01	0.2394E-01	0.3104E-01	0.3954E-01	0.4946E-01
41	0.3560E-02	0.5085E-02	0.7155E-02	0.9915E-02	0.1352E-01	0.1815E-01	0.2394E-01	0.3104E-01	0.3954E-01	0.4946E-01
43	0.3560E-02	0.5085E-02	0.7155E-02	0.9915E-02	0.1352E-01	0.1815E-01	0.2394E-01	0.3104E-01	0.3954E-01	0.4946E-01
45	0.3560E-02	0.5085E-02	0.7155E-02	0.9915E-02	0.1352E-01	0.1815E-01	0.2394E-01	0.3104E-01	0.3954E-01	0.4946E-01

VELOCITY VECTOR DISPLAYED IN COMPUTATIONAL COORDINATES

[illegible]

5	0.0000E+00	0.6136E-02	0.1827E-01	0.3916E-01	0.7073E-01	0.1119E+00	0.1563E+00	0.2022E+00	0.2490E+00	0.2950E+00
7	0.0000E+00	0.1552E-01	0.3862E-01	0.7366E-01	0.1258E+00	0.1837E+00	0.2345E+00	0.2790E+00	0.3216E+00	0.3632E+00
9	0.0000E+00	0.2335E-01	0.5855E-01	0.1109E+00	0.1783E+00	0.2363E+00	0.2775E+00	0.3156E+00	0.3538E+00	0.3920E+00
11	0.0000E+00	0.3003E-01	0.7560E-01	0.1417E+00	0.2184E+00	0.2756E+00	0.3129E+00	0.3456E+00	0.3794E+00	0.4146E+00
13	0.0000E+00	0.3540E-01	0.8891E-01	0.1653E+00	0.2491E+00	0.3076E+00	0.3446E+00	0.3759E+00	0.4072E+00	0.4395E+00
15	0.0000E+00	0.3981E-01	0.9991E-01	0.1850E+00	0.2757E+00	0.3370E+00	0.3753E+00	0.4074E+00	0.4386E+00	0.4695E+00
17	0.0000E+00	0.4424E-01	0.1110E+00	0.2049E+00	0.3028E+00	0.3677E+00	0.4078E+00	0.4413E+00	0.4736E+00	0.5050E+00
19	0.0000E+00	0.4920E-01	0.1234E+00	0.2270E+00	0.3330E+00	0.4017E+00	0.4440E+00	0.4792E+00	0.5131E+00	0.5459E+00
21	0.0000E+00	0.5487E-01	0.1375E+00	0.2522E+00	0.3669E+00	0.4400E+00	0.4847E+00	0.5217E+00	0.5574E+00	0.5921E+00
23	0.0000E+00	0.6119E-01	0.1532E+00	0.2800E+00	0.4042E+00	0.4819E+00	0.5291E+00	0.5683E+00	0.6059E+00	0.6426E+00
25	0.0000E+00	0.6771E-01	0.1695E+00	0.3086E+00	0.4421E+00	0.5244E+00	0.5741E+00	0.6152E+00	0.6548E+00	0.6934E+00
27	0.0000E+00	0.7295E-01	0.1825E+00	0.3315E+00	0.4723E+00	0.5581E+00	0.6097E+00	0.6524E+00	0.6933E+00	0.7331E+00
29	0.0000E+00	0.7343E-01	0.1837E+00	0.3337E+00	0.4757E+00	0.5621E+00	0.6140E+00	0.6568E+00	0.6976E+00	0.7371E+00
31	0.0000E+00	0.6562E-01	0.1643E+00	0.3000E+00	0.4316E+00	0.5133E+00	0.5626E+00	0.6031E+00	0.6418E+00	0.6788E+00
33	0.0000E+00	0.5343E-01	0.1339E+00	0.2461E+00	0.3595E+00	0.4322E+00	0.4768E+00	0.5139E+00	0.5498E+00	0.5850E+00
35	0.0000E+00	0.5581E-01	0.1398E+00	0.2565E+00	0.3730E+00	0.4471E+00	0.4924E+00	0.5300E+00	0.5664E+00	0.6021E+00
37	0.0000E+00	0.5857E-01	0.1467E+00	0.2688E+00	0.3897E+00	0.4660E+00	0.5125E+00	0.5511E+00	0.5884E+00	0.6249E+00
39	0.0000E+00	0.5885E-01	0.1475E+00	0.2701E+00	0.3915E+00	0.4681E+00	0.5148E+00	0.5535E+00	0.5909E+00	0.6276E+00
41	0.0000E+00	0.5837E-01	0.1462E+00	0.2679E+00	0.3887E+00	0.4649E+00	0.5114E+00	0.5500E+00	0.5873E+00	0.6239E+00
43	0.0000E+00	0.5768E-01	0.1445E+00	0.2649E+00	0.3847E+00	0.4604E+00	0.5066E+00	0.5450E+00	0.5821E+00	0.6185E+00
45	0.0000E+00	0.5698E-01	0.1428E+00	0.2618E+00	0.3805E+00	0.4557E+00	0.5017E+00	0.5398E+00	0.5767E+00	0.6129E+00

IY	12	21	23	25	27	29	31	33	35	37	39
----	----	----	----	----	----	----	----	----	----	----	----

1	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
3	0.1663E+00	0.1920E+00	0.2125E+00	0.2260E+00	0.2327E+00	0.2334E+00	0.2286E+00	0.2191E+00	0.2074E+00	0.1958E+00	0.1958E+00
5	0.3385E+00	0.3774E+00	0.4102E+00	0.4357E+00	0.4533E+00	0.4620E+00	0.4599E+00	0.4478E+00	0.4299E+00	0.4105E+00	0.4105E+00
7	0.4036E+00	0.4417E+00	0.4767E+00	0.5074E+00	0.5324E+00	0.5489E+00	0.5535E+00	0.5459E+00	0.5305E+00	0.5123E+00	0.5123E+00
9	0.4300E+00	0.4673E+00	0.5029E+00	0.5358E+00	0.5642E+00	0.5848E+00	0.5933E+00	0.5890E+00	0.5761E+00	0.5597E+00	0.5597E+00
11	0.4508E+00	0.4872E+00	0.5232E+00	0.5577E+00	0.5888E+00	0.6127E+00	0.6246E+00	0.6234E+00	0.6131E+00	0.5988E+00	0.5988E+00
13	0.4733E+00	0.5086E+00	0.5446E+00	0.5805E+00	0.6142E+00	0.6414E+00	0.6568E+00	0.6589E+00	0.6516E+00	0.6400E+00	0.6400E+00
15	0.5012E+00	0.5347E+00	0.5704E+00	0.6074E+00	0.6435E+00	0.6742E+00	0.6933E+00	0.6990E+00	0.6950E+00	0.6866E+00	0.6866E+00
17	0.5361E+00	0.5682E+00	0.6030E+00	0.6406E+00	0.6792E+00	0.7133E+00	0.7362E+00	0.7454E+00	0.7450E+00	0.7400E+00	0.7400E+00
19	0.5779E+00	0.6101E+00	0.6443E+00	0.6822E+00	0.7227E+00	0.7602E+00	0.7866E+00	0.7991E+00	0.8018E+00	0.8002E+00	0.8002E+00
21	0.6260E+00	0.6596E+00	0.6946E+00	0.7332E+00	0.7754E+00	0.8159E+00	0.8451E+00	0.8597E+00	0.8646E+00	0.8656E+00	0.8656E+00
23	0.6786E+00	0.7147E+00	0.7519E+00	0.7923E+00	0.8364E+00	0.8791E+00	0.9094E+00	0.9238E+00	0.9292E+00	0.9315E+00	0.9315E+00
25	0.7314E+00	0.7698E+00	0.8098E+00	0.8529E+00	0.8990E+00	0.9431E+00	0.9722E+00	0.9825E+00	0.9857E+00	0.9873E+00	0.9873E+00
27	0.7723E+00	0.8119E+00	0.8530E+00	0.8966E+00	0.9414E+00	0.9676E+00	0.9829E+00	0.9888E+00	0.9988E+00	0.1000E+01	0.1000E+01
29	0.7756E+00	0.8136E+00	0.8514E+00	0.8877E+00	0.9132E+00	0.9249E+00	0.9487E+00	0.9861E+00	0.9998E+00	0.1000E+01	0.1000E+01
31	0.7143E+00	0.7483E+00	0.7807E+00	0.8105E+00	0.8362E+00	0.8644E+00	0.9100E+00	0.9682E+00	0.9989E+00	0.1000E+01	0.1000E+01
33	0.6200E+00	0.6556E+00	0.6929E+00	0.7333E+00	0.7807E+00	0.8363E+00	0.9018E+00	0.9691E+00	0.9990E+00	0.1000E+01	0.1000E+01
35	0.6378E+00	0.6745E+00	0.7138E+00	0.7578E+00	0.8087E+00	0.8671E+00	0.9299E+00	0.9854E+00	0.9997E+00	0.1000E+01	0.1000E+01
37	0.6614E+00	0.6987E+00	0.7386E+00	0.7829E+00	0.8333E+00	0.8895E+00	0.9465E+00	0.9917E+00	0.9999E+00	0.1000E+01	0.1000E+01
39	0.6642E+00	0.7017E+00	0.7418E+00	0.7862E+00	0.8366E+00	0.8924E+00	0.9484E+00	0.9922E+00	0.9999E+00	0.1000E+01	0.1000E+01
41	0.6604E+00	0.6979E+00	0.7378E+00	0.7823E+00	0.8328E+00	0.8889E+00	0.9455E+00	0.9908E+00	0.9999E+00	0.1000E+01	0.1000E+01
43	0.6549E+00	0.6922E+00	0.7320E+00	0.7765E+00	0.8271E+00	0.8835E+00	0.9410E+00	0.9883E+00	0.9999E+00	0.1000E+01	0.1000E+01
45	0.6491E+00	0.6862E+00	0.7260E+00	0.7704E+00	0.8210E+00	0.8778E+00	0.9362E+00	0.9854E+00	0.9999E+00	0.1000E+01	0.1000E+01

IY	41	43
----	----	----

IY	
1	0.0000E+00 0.0000E+00
3	0.1854E+00 0.1767E+00
5	0.3925E+00 0.3771E+00
7	0.4945E+00 0.4790E+00
9	0.5432E+00 0.5287E+00
11	0.5841E+00 0.5710E+00
13	0.6276E+00 0.6167E+00
15	0.6773E+00 0.6691E+00
17	0.7341E+00 0.7294E+00
19	0.7978E+00 0.7966E+00
21	0.8662E+00 0.8680E+00
23	0.9337E+00 0.9373E+00
25	0.9891E+00 0.9916E+00
27	0.1000E+01 0.1000E+01
29	0.1000E+01 0.1000E+01
31	0.1000E+01 0.1000E+01
33	0.1000E+01 0.1000E+01
35	0.1000E+01 0.1000E+01
37	0.1000E+01 0.1000E+01
39	0.1000E+01 0.1000E+01
41	0.1000E+01 0.1000E+01
43	0.1000E+01 0.1000E+01
45	0.1000E+01 0.1000E+01

IZ	STATION 33			****			VEL-IY			/UZERO			****		
	1	3	5	7	9	11	13	15	17	19					
IY															
1	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
3	0.0000E+00	0.5095E-04	0.7389E-04	0.6651E-04	0.4825E-04	0.3294E-04	0.2307E-04	0.1754E-04	0.1464E-04	0.1317E-04					
5	0.0000E+00	0.3755E-04	0.7513E-04	0.9823E-04	0.9724E-04	0.8038E-04	0.6422E-04	0.5623E-04	0.5430E-04	0.5499E-04					
7	0.0000E+00	0.2578E-04	0.5999E-04	0.9933E-04	0.1328E-03	0.1427E-03	0.1359E-03	0.1307E-03	0.1314E-03	0.1354E-03					
9	0.0000E+00	0.2501E-04	0.6277E-04	0.1167E-03	0.1799E-03	0.2228E-03	0.2372E-03	0.2431E-03	0.2508E-03	0.2606E-03					
11	0.0000E+00	0.3541E-04	0.9039E-04	0.1714E-03	0.2664E-03	0.3372E-03	0.3774E-03	0.4042E-03	0.4273E-03	0.4484E-03					
13	0.0000E+00	0.5635E-04	0.1436E-03	0.2706E-03	0.4133E-03	0.5184E-03	0.5855E-03	0.6393E-03	0.6875E-03	0.7283E-03					
15	0.0000E+00	0.9097E-04	0.2309E-03	0.4315E-03	0.6495E-03	0.8059E-03	0.9076E-03	0.9937E-03	0.1075E-02	0.1146E-02					
17	0.0000E+00	0.1475E-03	0.3728E-03	0.6911E-03	0.1027E-02	0.1262E-02	0.1412E-02	0.1541E-02	0.1664E-02	0.1774E-02					
19	0.0000E+00	0.2405E-03	0.6059E-03	0.1114E-02	0.1636E-02	0.1989E-02	0.2212E-02	0.2400E-02	0.2578E-02	0.2738E-02					
21	0.0000E+00	0.3956E-03	0.9919E-03	0.1811E-02	0.2630E-02	0.3168E-02	0.3501E-02	0.3775E-02	0.4031E-02	0.4255E-02					
23	0.0000E+00	0.6599E-03	0.1648E-02	0.2988E-02	0.4287E-02	0.5120E-02	0.5623E-02	0.6029E-02	0.6396E-02	0.6709E-02					
25	0.0000E+00	0.1113E-02	0.2768E-02	0.4980E-02	0.7069E-02	0.8372E-02	0.9144E-02	0.9751E-02	0.1028E-01	0.1072E-01					
27	0.0000E+00	0.1806E-02	0.4483E-02	0.8026E-02	0.1131E-01	0.1332E-01	0.1449E-01	0.1539E-01	0.1616E-01	0.1678E-01					
29	0.0000E+00	0.2376E-02	0.5913E-02	0.1063E-01	0.1503E-01	0.1773E-01	0.1931E-01	0.2051E-01	0.2154E-01	0.2234E-01					
31	0.0000E+00	0.1952E-02	0.4889E-02	0.8897E-02	0.1279E-01	0.1526E-01	0.1674E-01	0.1790E-01	0.1891E-01	0.1970E-01					
33	0.0000E+00	0.1017E-02	0.2557E-02	0.4678E-02	0.6825E-02	0.8240E-02	0.9103E-02	0.9796E-02	0.1042E-01	0.1093E-01					
35	0.0000E+00	0.4894E-03	0.1232E-02	0.2257E-02	0.3280E-02	0.3951E-02	0.4364E-02	0.4705E-02	0.5025E-02	0.5317E-02					

37	0.0000E+00	0.2968E-03	0.7538E-03	0.1384E-02	0.2008E-02	0.2414E-02	0.2664E-02	0.2870E-02	0.3069E-02	0.3259E-02
39	0.0000E+00	0.2231E-03	0.5706E-03	0.1050E-02	0.1524E-02	0.1831E-02	0.2018E-02	0.2173E-02	0.2321E-02	0.2465E-02
41	0.0000E+00	0.1956E-03	0.5022E-03	0.9255E-03	0.1345E-02	0.1615E-02	0.1780E-02	0.1915E-02	0.2046E-02	0.2170E-02
43	0.0000E+00	0.1956E-03	0.5031E-03	0.9281E-03	0.1349E-02	0.1622E-02	0.1786E-02	0.1922E-02	0.2051E-02	0.2175E-02
45	0.0000E+00	0.2176E-03	0.5601E-03	0.1034E-02	0.1504E-02	0.1807E-02	0.1990E-02	0.2140E-02	0.2283E-02	0.2419E-02

I2	21	23	25	27	29	31	33	35	37	39
IY										
1	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
3	0.1237E-04	0.1167E-04	0.1063E-04	0.9036E-05	0.6962E-05	0.4754E-05	0.3046E-05	0.2234E-05	0.2140E-05	0.2394E-05
5	0.5603E-04	0.5568E-04	0.5253E-04	0.4579E-04	0.3554E-04	0.2315E-04	0.1234E-04	0.6854E-05	0.6513E-05	0.8708E-05
7	0.1392E-03	0.1395E-03	0.1330E-03	0.1175E-03	0.9178E-04	0.5887E-04	0.2890E-04	0.1323E-04	0.1235E-04	0.1898E-04
9	0.2690E-03	0.2708E-03	0.2601E-03	0.2314E-03	0.1818E-03	0.1159E-03	0.5446E-04	0.2170E-04	0.1971E-04	0.3371E-04
11	0.4648E-03	0.4694E-03	0.4530E-03	0.4053E-03	0.3195E-03	0.2031E-03	0.9273E-04	0.3308E-04	0.2912E-04	0.5460E-04
13	0.7580E-03	0.7678E-03	0.7434E-03	0.6677E-03	0.5278E-03	0.3344E-03	0.1489E-03	0.4763E-04	0.4042E-04	0.8348E-04
15	0.1197E-02	0.1215E-02	0.1179E-02	0.1062E-02	0.8402E-03	0.5234E-03	0.2288E-03	0.6396E-04	0.5188E-04	0.1218E-03
17	0.1856E-02	0.1887E-02	0.1833E-02	0.1653E-02	0.1306E-02	0.8136E-03	0.3355E-03	0.7520E-04	0.5759E-04	0.1690E-03
19	0.2859E-02	0.2905E-02	0.2823E-02	0.2543E-02	0.1998E-02	0.1215E-02	0.4583E-03	0.5891E-04	0.4104E-04	0.2183E-03
21	0.4422E-02	0.4478E-02	0.4344E-02	0.3900E-02	0.3024E-02	0.1749E-02	0.5403E-03	0.4895E-04	0.3976E-04	0.2474E-03
23	0.6928E-02	0.6982E-02	0.6747E-02	0.6021E-02	0.4557E-02	0.2375E-02	0.3857E-03	0.4181E-03	0.2852E-03	0.1963E-03
25	0.1101E-01	0.1105E-01	0.1066E-01	0.9468E-01	0.6913E-02	0.2874E-02	0.5668E-03	0.1451E-02	0.9065E-03	0.7411E-04
27	0.1719E-01	0.1726E-01	0.1672E-01	0.1487E-01	0.9720E-02	0.1889E-02	0.2827E-02	0.3837E-02	0.2300E-02	0.8638E-03
29	0.2286E-01	0.2292E-01	0.2208E-01	0.1877E-01	0.1053E-01	0.7531E-03	0.4832E-02	0.5847E-02	0.3763E-02	0.1672E-02
31	0.2016E-01	0.2010E-01	0.1908E-01	0.1624E-01	0.1029E-01	0.2163E-02	0.3336E-02	0.4876E-02	0.3631E-02	0.1832E-02
33	0.1127E-01	0.1133E-01	0.1089E-01	0.9623E-02	0.7178E-02	0.3772E-02	0.5548E-03	0.1287E-02	0.1509E-02	0.1006E-02
35	0.5563E-02	0.5728E-02	0.5751E-02	0.5532E-02	0.4945E-02	0.3928E-02	0.2626E-02	0.1403E-02	0.5675E-03	0.1744E-03
37	0.3436E-02	0.3592E-02	0.3710E-02	0.3757E-02	0.3678E-02	0.3402E-02	0.2886E-02	0.2196E-02	0.1521E-02	0.9815E-03
39	0.2601E-02	0.2728E-02	0.2839E-02	0.2919E-02	0.2935E-02	0.2839E-02	0.2586E-02	0.2195E-02	0.1772E-02	0.1347E-02
41	0.2290E-02	0.2401E-02	0.2502E-02	0.2579E-02	0.2609E-02	0.2554E-02	0.2382E-02	0.2108E-02	0.1819E-02	0.1499E-02
43	0.2293E-02	0.2402E-02	0.2500E-02	0.2574E-02	0.2603E-02	0.2550E-02	0.2388E-02	0.2138E-02	0.1891E-02	0.1618E-02
45	0.2547E-02	0.2565E-02	0.2767E-02	0.2842E-02	0.2864E-02	0.2793E-02	0.2604E-02	0.2326E-02	0.2059E-02	0.1778E-02

I2	41	43
IY		
1	0.0000E+00	0.0000E+00
3	0.2641E-05	0.2683E-05
5	0.1101E-04	0.1224E-04
7	0.2610E-04	0.3024E-04
9	0.4902E-04	0.5820E-04
11	0.8284E-04	0.1001E-03
13	0.1318E-03	0.1617E-03
15	0.2008E-03	0.2504E-03
17	0.2947E-03	0.3741E-03
19	0.4143E-03	0.5381E-03
21	0.5486E-03	0.7363E-03
23	0.6533E-03	0.9276E-03
25	0.5983E-03	0.9680E-03
27	0.8925E-04	0.5722E-03
29	0.4691E-03	0.1152E-03

31 -.7380E-03 -.1978E-03
 33 -.5236E-03 -.2490E-03
 35 0.3570E-04 -.4153E-04
 37 0.5841E-03 0.2784E-03
 39 0.9405E-03 0.5651E-03
 41 0.1146E-02 0.7762E-03
 43 0.1296E-02 0.9372E-03
 45 0.1446E-02 0.1076E-02

STATION	33	****	VEJ-JZ	/UZERO	****	11	13	15	17	19	
IY	12	1	3	5	7	9	11	13	15	17	19
1	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
3	0.0000E+00	0.4925E-04	0.8588E-04	0.8831E-04	0.9858E-04	0.6797E-04	0.4571E-04	0.1942E-04	-.2018E-04	-.3503E-04	0.0000E+00
5	0.0000E+00	0.3549E-04	0.7136E-04	0.1203E-03	0.1047E-03	0.1203E-03	0.7392E-04	0.1886E-04	-.6642E-04	-.1992E-03	0.0000E+00
7	0.0000E+00	0.2407E-04	0.4762E-04	0.7257E-04	0.9170E-04	0.8974E-04	0.5788E-04	-.6216E-05	-.1098E-03	-.2682E-03	0.0000E+00
9	0.0000E+00	0.1608E-04	0.3042E-04	0.4382E-04	0.5278E-04	0.5019E-04	0.2466E-04	-.3482E-04	-.1395E-03	-.3048E-03	0.0000E+00
11	0.0000E+00	0.1071E-04	0.1958E-04	0.2624E-04	0.2739E-04	0.1832E-04	-.8344E-05	-.6524E-04	-.1690E-03	-.3384E-03	0.0000E+00
13	0.0000E+00	0.7098E-05	0.1259E-04	0.1540E-04	0.1174E-04	-.3546E-05	-.3653E-04	-.9764E-04	-.2043E-03	-.3793E-03	0.0000E+00
15	0.0000E+00	0.4615E-05	0.7733E-05	0.7629E-05	-.1224E-06	-.2136E-04	-.6227E-04	-.1327E-03	-.2492E-03	-.4358E-03	0.0000E+00
17	0.0000E+00	0.2877E-05	0.4149E-05	0.1355E-05	-.1080E-04	-.3895E-04	-.8994E-04	-.1743E-03	-.3091E-03	-.5186E-03	0.0000E+00
19	0.0000E+00	0.1629E-05	0.1310E-05	-.4342E-05	-.2187E-04	-.5911E-04	-.1241E-03	-.2291E-03	-.3933E-03	-.6430E-03	0.0000E+00
21	0.0000E+00	0.6782E-06	-.1283E-05	-.1056E-04	-.3561E-04	-.8611E-04	-.1721E-03	-.3087E-03	-.5196E-03	-.8357E-03	0.0000E+00
23	0.0000E+00	-.1149E-06	-.4081E-05	-.1845E-04	-.5463E-04	-.1251E-03	-.2429E-03	-.4282E-03	-.7111E-03	-.1131E-02	0.0000E+00
25	0.0000E+00	-.7704E-06	-.7028E-05	-.2762E-04	-.7765E-04	-.1732E-03	-.3312E-03	-.5778E-03	-.9522E-03	-.1506E-02	0.0000E+00
27	0.0000E+00	-.8482E-06	-.7353E-05	-.2840E-04	-.7970E-04	-.1781E-03	-.3412E-03	-.5962E-03	-.9839E-03	-.1558E-02	0.0000E+00
29	0.0000E+00	0.7250E-06	0.1710E-05	0.3117E-05	0.3019E-05	-.2166E-05	-.1546E-04	-.4120E-04	-.8680E-04	-.1620E-03	0.0000E+00
31	0.0000E+00	0.2249E-05	0.1064E-04	0.3531E-04	0.9168E-04	0.1946E-03	0.3609E-03	0.6165E-03	0.9999E-03	0.1561E-02	0.0000E+00
33	0.0000E+00	0.1687E-05	0.8350E-05	0.2812E-04	0.7502E-04	0.1643E-03	0.3125E-03	0.5450E-03	0.9003E-03	0.1429E-02	0.0000E+00
35	0.0000E+00	0.3315E-06	0.3677E-05	0.1423E-04	0.3943E-04	0.8706E-04	0.1658E-03	0.2891E-03	0.4775E-03	0.7587E-03	0.0000E+00
37	0.0000E+00	0.4972E-06	0.2585E-05	0.8575E-05	0.2214E-04	0.4697E-04	0.8733E-04	0.1500E-03	0.2452E-03	0.3874E-03	0.0000E+00
39	0.0000E+00	0.4043E-06	0.1826E-05	0.3866E-05	0.1488E-04	0.3111E-04	0.5725E-04	0.9756E-04	0.1585E-03	0.2492E-03	0.0000E+00
41	0.0000E+00	0.2833E-06	0.1368E-05	0.475E-05	0.1137E-04	0.2367E-04	0.4334E-04	0.7356E-04	0.1191E-03	0.1866E-03	0.0000E+00
43	0.0000E+00	0.1687E-06	0.1030E-05	0.18E-05	0.9006E-05	0.1871E-04	0.3415E-04	0.5777E-04	0.9324E-04	0.1456E-03	0.0000E+00
45	0.0000E+00	0.4122E-07	0.7019E-06	0.2629E-05	0.6847E-05	0.1421E-04	0.2581E-04	0.4347E-04	0.6988E-04	0.1087E-03	0.0000E+00

STATION	33	****	VEJ-JZ	/UZERO	****	31	33	35	37	39	
IY	12	1	3	5	7	9	11	13	15	17	19
1	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
3	-.1878E-03	-.3382E-03	-.5341E-03	-.7513E-03	-.9383E-03	-.1019E-02	-.9216E-03	-.6495E-03	-.2905E-03	0.5377E-04	0.0000E+00
5	-.3996E-03	-.6841E-03	-.1054E-02	-.1474E-02	-.1852E-02	-.2033E-02	-.1861E-02	-.1325E-02	-.5949E-03	0.1209E-03	0.0000E+00
7	-.5031E-03	-.8351E-03	-.1270E-02	-.1775E-02	-.2245E-02	-.2489E-02	-.2305E-02	-.1661E-02	-.7569E-03	0.1475E-03	0.0000E+00
9	-.5521E-03	-.9029E-03	-.1165E-02	-.1906E-02	-.2417E-02	-.2693E-02	-.2509E-02	-.1821E-02	-.8399E-03	0.1522E-03	0.0000E+00
11	-.5953E-03	-.9619E-03	-.1447E-02	-.2018E-02	-.2563E-02	-.2864E-02	-.2679E-02	-.1955E-02	-.9117E-03	0.1527E-03	0.0000E+00
13	-.6478E-03	-.1033E-02	-.1545E-02	-.2151E-02	-.2733E-02	-.3060E-02	-.2870E-02	-.2103E-02	-.9899E-03	0.1524E-03	0.0000E+00
15	-.7215E-03	-.1133E-02	-.1682E-02	-.2333E-02	-.2962E-02	-.3317E-02	-.3111E-02	-.2281E-02	-.1082E-02	0.1511E-03	0.0000E+00

17	- .8339E-03	- .1286E-02	- .1890E-02	- .2609E-02	- .3304E-02	- .3690E-02	- .3442E-02	- .2511E-02	- .1195E-02	0.1478E-03
19	- .1011E-02	- .1533E-02	- .2226E-02	- .3051E-02	- .3845E-02	- .4265E-02	- .3924E-02	- .2817E-02	- .1332E-02	0.1430E-03
21	- .1295E-02	- .1936E-02	- .2781E-02	- .3784E-02	- .4743E-02	- .5198E-02	- .4652E-02	- .3222E-02	- .1486E-02	0.1440E-03
23	- .1737E-02	- .2575E-02	- .3677E-02	- .4991E-02	- .6746E-02	- .6747E-02	- .5749E-02	- .3715E-02	- .1610E-02	0.1820E-03
25	- .2301E-02	- .3407E-02	- .4881E-02	- .6692E-02	- .8491E-02	- .9050E-02	- .7150E-02	- .4102E-02	- .1531E-02	0.3565E-03
27	- .2386E-02	- .3550E-02	- .5127E-02	- .7083E-02	- .8517E-02	- .7833E-02	- .6065E-02	- .3433E-02	- .7699E-03	0.9092E-03
29	- .2762E-03	- .4314E-03	- .6011E-03	- .6879E-03	- .8042E-03	- .1180E-02	- .7359E-03	0.1299E-03	0.1176E-02	0.1976E-02
31	0.2360E-02	0.3464E-02	0.4922E-02	0.6652E-02	0.8112E-02	0.8195E-02	0.6792E-02	0.5283E-02	0.4059E-02	0.3421E-02
33	0.2119E-02	0.3253E-02	0.4646E-02	0.6308E-02	0.7913E-02	0.8792E-02	0.8520E-02	0.7434E-02	0.5814E-02	0.4530E-02
35	0.1167E-02	0.1742E-02	0.2512E-02	0.3478E-02	0.4561E-02	0.5563E-02	0.6212E-02	0.6277E-02	0.5531E-02	0.4671E-02
37	0.5952E-03	0.8914E-03	0.1301E-02	0.1845E-02	0.2524E-02	0.3297E-02	0.4048E-02	0.4536E-02	0.4434E-02	0.4102E-02
39	0.3815E-03	0.5705E-03	0.8345E-03	0.1192E-02	0.1659E-02	0.2231E-02	0.2855E-02	0.3361E-02	0.3448E-02	0.3356E-02
41	0.2847E-03	0.4249E-03	0.6207E-03	0.8878E-03	0.1240E-02	0.1682E-02	0.2184E-02	0.2622E-02	0.2721E-02	0.2681E-02
43	0.2217E-03	0.3301E-03	0.4817E-03	0.6888E-03	0.9638E-03	0.1313E-02	0.1716E-02	0.2079E-02	0.2147E-02	0.2088E-02
45	0.1650E-03	0.2452E-03	0.3574E-03	0.5115E-03	0.7181E-03	0.9839E-03	0.1296E-02	0.1583E-02	0.1611E-02	0.1514E-02

IZ	41	43
----	----	----

IY

1	0.0000E+00	0.0000E+00
3	0.3314E-03	0.5487E-03
5	0.7093E-03	0.1178E-02
7	0.9047E-03	0.1517E-02
9	0.9913E-03	0.1677E-02
11	0.1061E-02	0.1810E-02
13	0.1136E-02	0.1955E-02
15	0.1221E-02	0.2120E-02
17	0.1315E-02	0.2306E-02
19	0.1416E-02	0.2500E-02
21	0.1518E-02	0.2683E-02
23	0.1625E-02	0.2828E-02
25	0.1774E-02	0.2929E-02
27	0.2083E-02	0.3037E-02
29	0.2613E-02	0.3219E-02
31	0.3305E-02	0.3463E-02
33	0.3896E-02	0.3675E-02
35	0.4058E-02	0.3701E-02
37	0.3751E-02	0.3462E-02
39	0.3199E-02	0.3019E-02
41	0.2597E-02	0.2483E-02
43	0.2010E-02	0.1918E-02
45	0.1420E-02	0.1332E-02

STATION 33

**** VOR-X *YZ/UZ ****

IZ	1	3	5	7	9	11	13	15	17	19
IY	1	- .9061E-08	0.2304E+01	0.2383E+01	0.1770E+01	0.1237E+01	0.8617E+00	0.5759E+00	0.2977E+00	- .9537E-01 - .7305E+00

3	-1998E+01	-1018E+01	-1997E-01	0.5710E+00	0.6945E+00	0.5783E+00	0.3846E+00	0.1326E+00	-0.2497E+00	-0.8693E+00
5	-1187E+01	-9676E+00	-6392E+00	-2491E+00	0.5744E-01	0.1584E+00	0.8413E-01	-0.7820E-01	-0.2872E+00	-0.5455E+00
7	-7534E+00	-7132E+00	-6417E+00	-5210E+00	-3244E+00	-1209E+00	-9114E-01	-1.007E+00	-0.1273E+00	-0.1669E+00
9	-7003E+00	-7058E+00	-7079E+00	-6753E+00	-4812E+00	-2154E+00	-1031E+00	-0.8317E-01	-0.7941E-01	-0.8535E-01
11	-9734E+00	-9916E+00	-1010E+01	-9586E+00	-6325E+00	-2843E+00	-1454E+00	-0.1038E+00	-0.8479E-01	-0.7850E-01
13	-1539E+01	-1564E+01	-1584E+01	-1457E+01	-8947E+00	-3904E+00	-2039E+00	-0.1456E+00	-0.1105E+00	-0.9068E-01
15	-2481E+01	-2511E+01	-2521E+01	-2261E+01	-1325E+01	-5614E+00	-2902E+00	-0.2068E+00	-0.1546E+00	-0.1191E+00
17	-4025E+01	-4054E+01	-4037E+01	-3544E+01	-1998E+01	-8220E+00	-4157E+00	-0.2906E+00	-0.2137E+00	-0.1606E+00
19	-6567E+01	-6588E+01	-6510E+01	-5595E+01	-3043E+01	-1217E+01	-6007E+00	-0.4088E+00	-0.2922E+00	-0.2137E+00
21	-1080E+02	-1080E+02	-1060E+02	-8916E+01	-4683E+01	-1825E+01	-8785E+00	-0.5809E+00	-0.4005E+00	-0.2806E+00
23	-1803E+02	-1796E+02	-1749E+02	-1440E+02	-7309E+01	-2776E+01	-1304E+01	-0.8344E+00	-0.5498E+00	-0.3616E+00
25	-3039E+02	-3018E+02	-2918E+02	-2350E+02	-1155E+02	-4275E+01	-1954E+01	-0.1203E+01	-0.7455E+00	-0.4417E+00
27	-4331E+02	-4887E+02	-4704E+02	-3733E+02	-1791E+02	-6491E+01	-2886E+01	-0.1696E+01	-0.9632E+00	-0.4656E+00
29	-6463E+02	-6434E+02	-6232E+02	-4986E+02	-2406E+02	-8717E+01	-3836E+01	-0.2189E+01	-0.1148E+01	-0.4131E+00
31	-5291E+02	-5305E+02	-5211E+02	-4312E+02	-2176E+02	-8146E+01	-3705E+01	-0.2214E+01	-0.1260E+01	-0.5790E+00
33	-2761E+02	-2768E+02	-2730E+02	-2323E+02	-1230E+02	-4741E+01	-2214E+01	-0.1381E+01	-0.8604E+00	-0.5017E+00
35	-3347E+02	-1348E+02	-1326E+02	-1118E+02	-5860E+01	-2270E+01	-1082E+01	-0.7031E+00	-0.4725E+00	-0.3196E+00
37	-8369E+01	-8377E+01	-8227E+01	-6898E+01	-3584E+01	-1385E+01	-6622E+00	-0.4338E+00	-0.2959E+00	-0.2056E+00
39	-6413E+01	-6416E+01	-6295E+01	-5269E+01	-2731E+01	-1052E+01	-5012E+00	-0.3267E+00	-0.2214E+00	-0.1526E+00
41	-5698E+01	-5688E+01	-5578E+01	-4671E+01	-2422E+01	-9317E+00	-4427E+00	-0.2875E+00	-0.1937E+00	-0.1324E+00
43	-5724E+01	-5721E+01	-5608E+01	-4633E+01	-2440E+01	-9378E+00	-4446E+00	-0.2876E+00	-0.1928E+00	-0.1308E+00
45	-6388E+01	-6381E+01	-6252E+01	-5241E+01	-2724E+01	-1046E+01	-4947E+00	-0.3189E+00	-0.2126E+00	-0.1432E+00
12	21	23	25	27	29	31	33	35	37	39
14	-7741E-01	-3231E+01	-5178E+01	-7331E+01	-9166E+01	-9933E+01	-8942E+01	-0.6225E+01	-0.2653E+01	0.7695E+00
16	-1837E-01	-3231E+01	-5032E+01	-7032E+01	-8765E+01	-9510E+01	-8585E+01	-0.5999E+01	-0.2578E+01	0.7160E+00
18	-8770E-00	-1319E+01	-1913E+01	-2660E+01	-3437E+01	-3932E+01	-3755E+01	-0.2770E+01	-0.1258E+01	0.3379E+00
20	-2239E+00	-3076E+00	-4296E+00	-5962E+00	-7861E+00	-9287E+00	-9205E+00	-0.7059E+00	-0.3359E+00	0.8254E-01
22	-1009E+00	-1286E+00	-1727E+00	-2358E+00	-3109E+00	-3717E+00	-3758E+00	-0.2953E+00	-0.1460E+00	0.3006E-01
24	-8224E-01	-9625E-01	-1226E+00	-1625E+00	-2114E+00	-2525E+00	-2574E+00	-0.2054E+00	-0.1053E+00	0.1553E-01
26	-8384E-01	-8858E-01	-1051E+00	-1335E+00	-1697E+00	-2009E+00	-2052E+00	-0.1652E+00	-0.8779E-01	0.6067E-02
28	-9886E-01	-9323E-01	-1010E+00	-1210E+00	-1490E+00	-1743E+00	-1781E+00	-0.1443E+00	-0.7950E-01	-0.2226E-02
30	-1249E+00	-1060E+00	-1032E+00	-1142E+00	-1346E+00	-1557E+00	-1604E+00	-0.1310E+00	-0.7504E-01	-0.1048E-01
32	-1597E+00	-1249E+00	-1082E+00	-1070E+00	-1180E+00	-1361E+00	-1451E+00	-0.1209E+00	-0.7231E-01	-0.1876E-01
34	-1992E+00	-1437E+00	-1078E+00	-8808E-01	-8392E-01	-1006E+00	-1240E+00	-0.1098E+00	-0.6888E-01	-0.2618E-01
36	-2337E+00	-1432E+00	-7497E-01	-2039E-01	0.1550E-01	-0.2818E-02	-0.7700E-01	-0.8995E-01	-0.5951E-01	-0.2933E-01
38	-2306E+00	-6961E-01	0.7530E-01	0.2306E+00	0.3844E+00	0.4168E+00	0.1004E+00	-0.5300E-01	-0.3746E-01	-0.2112E-01
40	-9938E-01	0.2211E+00	0.5928E+00	0.1170E+01	0.2414E+01	0.1742E+01	0.8555E+00	0.1245E+00	0.1091E-03	-0.1415E-03
42	0.1648E+00	0.7310E+00	0.1496E+01	0.2851E+01	0.3782E+01	0.2789E+01	0.1334E+01	0.4925E+00	0.1221E-01	0.3296E-04
44	-5007E-01	0.4261E+00	0.9526E+00	0.1626E+01	0.2313E+01	0.2006E+01	0.1047E+01	0.4147E+00	0.3125E-01	0.1624E-03
46	-2426E+00	-3715E-01	0.1516E+00	0.3390E+00	0.4761E+00	0.4631E+00	0.3051E+00	0.1312E+00	0.7275E-02	0.4121E-04
48	-2163E+00	-1440E+00	-8932E-01	-4254E-01	-1453E-02	0.2562E-01	0.2836E-01	0.1223E-01	0.3229E-03	0.2914E-05
50	-1463E+00	-1069E+00	-7947E-01	-5748E-01	-3610E-01	-1463E-01	0.1585E-02	0.4263E-02	0.1055E-03	0.4488E-06
52	-1073E+00	-7729E-01	-5628E-01	-3929E-01	-2268E-01	-6136E-02	0.5580E-02	0.5380E-02	0.9996E-04	0.2747E-06
54	-9206E-01	-6510E-01	-4603E-01	-3040E-01	-1516E-01	-4709E-03	0.8936E-02	0.7090E-02	0.1341E-03	0.2723E-06
56	-8996E-01	-6255E-01	-4297E-01	-2675E-01	-1097E-01	0.3841E-02	0.1257E-01	0.9654E-02	0.2260E-03	0.3322E-06
58	-9745E-01	-6668E-01	-4457E-01	-2614E-01	-8295E-02	0.8070E-02	0.1706E-01	0.1305E-01	0.4044E-03	0.3472E-06

IZ	41	43
1Y		
1	0.3532E+01	0.5702E+01
3	0.3390E+01	0.5500E+01
5	0.1734E+01	0.2905E+01
7	0.4704E+00	0.8125E+00
9	0.1997E+00	0.3546E+00
11	0.1352E+00	0.2475E+00
13	0.1003E+00	0.1905E+00
15	0.7523E-01	0.1499E+00
17	0.5301E-01	0.1137E+00
19	0.3200E-01	0.7921E-01
21	0.1213E-01	0.4606E-01
23	- .4235E-02	0.1633E-01
25	- .8730E-02	0.1284E-03
27	- .7011E-04	- .7324E-05
29	0.1351E-06	0.5024E-08
31	0.8925E-06	0.1359E-07
33	0.5944E-06	0.1295E-07
35	0.8298E-07	0.1559E-08
37	0.3627E-08	0.7453E-10
39	0.1642E-08	0.3048E-10
41	0.1214E-08	0.1500E-10
43	0.8829E-09	0.6412E-11
45	- .1873E-07	- .3739E-08

STATION	33	****	CP/2	****	11	13	15	17	19
IZ	1	3	5	7	9	11	13	15	17
1Y									
1	0.1821E-03	0.1786E-03	0.1760E-03	0.1745E-03	0.1734E-03	0.1724E-03	0.1713E-03	0.1698E-03	0.1677E-03
3	0.1760E-03	0.1760E-03	0.1754E-03	0.1745E-03	0.1735E-03	0.1725E-03	0.1713E-03	0.1698E-03	0.1677E-03
5	0.1740E-03	0.1741E-03	0.1740E-03	0.1738E-03	0.1733E-03	0.1724E-03	0.1713E-03	0.1698E-03	0.1677E-03
7	0.1731E-03	0.1731E-03	0.1731E-03	0.1730E-03	0.1727E-03	0.1721E-03	0.1712E-03	0.1698E-03	0.1678E-03
9	0.1724E-03	0.1724E-03	0.1723E-03	0.1722E-03	0.1720E-03	0.1716E-03	0.1708E-03	0.1696E-03	0.1678E-03
11	0.1717E-03	0.1716E-03	0.1716E-03	0.1715E-03	0.1713E-03	0.1709E-03	0.1703E-03	0.1693E-03	0.1676E-03
13	0.1708E-03	0.1708E-03	0.1707E-03	0.1706E-03	0.1704E-03	0.1701E-03	0.1696E-03	0.1687E-03	0.1673E-03
15	0.1699E-03	0.1699E-03	0.1698E-03	0.1697E-03	0.1695E-03	0.1692E-03	0.1687E-03	0.1679E-03	0.1667E-03
17	0.1689E-03	0.1689E-03	0.1688E-03	0.1687E-03	0.1685E-03	0.1682E-03	0.1678E-03	0.1670E-03	0.1659E-03
19	0.1677E-03	0.1677E-03	0.1676E-03	0.1675E-03	0.1673E-03	0.1670E-03	0.1665E-03	0.1658E-03	0.1646E-03
21	0.1654E-03	0.1653E-03	0.1652E-03	0.1651E-03	0.1649E-03	0.1645E-03	0.1640E-03	0.1632E-03	0.1620E-03
23	0.1588E-03	0.1587E-03	0.1586E-03	0.1584E-03	0.1581E-03	0.1577E-03	0.1571E-03	0.1562E-03	0.1548E-03
25	0.1379E-03	0.1378E-03	0.1376E-03	0.1374E-03	0.1370E-03	0.1365E-03	0.1358E-03	0.1346E-03	0.1330E-03
27	0.7968E-04	0.7958E-04	0.7942E-04	0.7918E-04	0.7883E-04	0.7829E-04	0.7746E-04	0.7617E-04	0.7408E-04
29	- .1396E-04	- .1398E-04	- .1401E-04	- .1406E-04	- .1416E-04	- .1436E-04	- .1477E-04	- .1560E-04	- .1728E-04
31	- .3201E-04	- .3193E-04	- .3181E-04	- .3165E-04	- .3141E-04	- .3108E-04	- .3067E-04	- .3024E-04	- .2998E-04
33	0.1609E-04	0.1615E-04	0.1624E-04	0.1638E-04	0.1659E-04	0.1690E-04	0.1735E-04	0.1798E-04	0.1879E-04

35	0.2767E-04	0.2770E-04	0.2773E-04	0.2778E-04	0.2785E-04	0.2796E-04	0.2812E-04	0.2834E-04	0.2864E-04	0.2901E-04
37	0.1987E-04	0.1988E-04	0.1989E-04	0.1990E-04	0.1993E-04	0.1996E-04	0.2000E-04	0.2006E-04	0.2013E-04	0.2022E-04
39	0.9038E-05	0.9040E-05	0.9044E-05	0.9049E-05	0.9055E-05	0.9064E-05	0.9076E-05	0.9090E-05	0.9105E-05	0.9119E-05
41	-0.3320E-05	-0.3319E-05	-0.3319E-05	-0.3318E-05	-0.3318E-05	-0.3318E-05	-0.3319E-05	-0.3323E-05	-0.3331E-05	-0.3346E-05
43	-0.1840E-04	-0.1840E-04	-0.1840E-04	-0.1840E-04	-0.1840E-04	-0.1840E-04	-0.1841E-04	-0.1843E-04	-0.1845E-04	-0.1848E-04
45	-0.3907E-04	-0.3907E-04	-0.3907E-04	-0.3908E-04	-0.3908E-04	-0.3908E-04	-0.3909E-04	-0.3913E-04	-0.3915E-04	-0.3916E-04

I2	21	23	25	27	29	31	33	35	37	39
IY										
1	0.1610E-03	0.1559E-03	0.1490E-03	0.1398E-03	0.1276E-03	0.1127E-03	0.9633E-04	0.8080E-04	0.6752E-04	0.5619E-04
3	0.1611E-03	0.1560E-03	0.1491E-03	0.1399E-03	0.1277E-03	0.1127E-03	0.9630E-04	0.8076E-04	0.6748E-04	0.5616E-04
5	0.1612E-03	0.1561E-03	0.1492E-03	0.1400E-03	0.1277E-03	0.1127E-03	0.9624E-04	0.8059E-04	0.6741E-04	0.5611E-04
7	0.1614E-03	0.1563E-03	0.1494E-03	0.1401E-03	0.1278E-03	0.1127E-03	0.9615E-04	0.8057E-04	0.6731E-04	0.5603E-04
9	0.1616E-03	0.1565E-03	0.1496E-03	0.1403E-03	0.1279E-03	0.1126E-03	0.9600E-04	0.8039E-04	0.6715E-04	0.5592E-04
11	0.1617E-03	0.1568E-03	0.1499E-03	0.1405E-03	0.1279E-03	0.1125E-03	0.9574E-04	0.8009E-04	0.6690E-04	0.5574E-04
13	0.1618E-03	0.1570E-03	0.1502E-03	0.1407E-03	0.1280E-03	0.1122E-03	0.9529E-04	0.7960E-04	0.6651E-04	0.5546E-04
15	0.1617E-03	0.1571E-03	0.1504E-03	0.1409E-03	0.1278E-03	0.1117E-03	0.9448E-04	0.7878E-04	0.6586E-04	0.5501E-04
17	0.1613E-03	0.1569E-03	0.1503E-03	0.1407E-03	0.1273E-03	0.1106E-03	0.9299E-04	0.7737E-04	0.6482E-04	0.5430E-04
19	0.1602E-03	0.1559E-03	0.1493E-03	0.1395E-03	0.1256E-03	0.1082E-03	0.9016E-04	0.7490E-04	0.6308E-04	0.5316E-04
21	0.1574E-03	0.1530E-03	0.1462E-03	0.1357E-03	0.1209E-03	0.1026E-03	0.8452E-04	0.7045E-04	0.6017E-04	0.5131E-04
23	0.1496E-03	0.1446E-03	0.1369E-03	0.1250E-03	0.1084E-03	0.8898E-04	0.7252E-04	0.6218E-04	0.5524E-04	0.4834E-04
25	0.1264E-03	0.1199E-03	0.1096E-03	0.9361E-04	0.7217E-04	0.5251E-04	0.4510E-04	0.4639E-04	0.4694E-04	0.4368E-04
27	0.6476E-04	0.5461E-04	0.3728E-04	0.9777E-05	-0.2183E-04	-0.3123E-04	-0.1100E-04	0.1756E-04	0.3347E-04	0.3660E-04
29	-0.2738E-04	-0.4018E-04	-0.6323E-04	-0.9903E-04	-0.1316E-03	-0.1228E-03	-0.7130E-04	-0.1634E-04	0.1633E-04	0.2720E-04
31	-0.3233E-04	-0.3765E-04	-0.4885E-04	-0.6763E-04	-0.8811E-04	-0.8967E-04	-0.6126E-04	-0.2291E-04	0.5559E-05	0.1848E-04
33	0.2053E-04	0.2062E-04	0.1897E-04	0.1426E-04	0.6135E-05	-0.2425E-05	-0.5739E-05	-0.1621E-05	0.7164E-05	0.1398E-04
35	0.2941E-04	0.2970E-04	0.2958E-04	0.2852E-04	0.2590E-04	0.2140E-04	0.1579E-04	0.1147E-04	0.1111E-04	0.1226E-04
37	0.2031E-04	0.2035E-04	0.2025E-04	0.1984E-04	0.1885E-04	0.1697E-04	0.1411E-04	0.1119E-04	0.9818E-05	0.9312E-05
39	0.9121E-05	0.9091E-05	0.8991E-05	0.8747E-05	0.8245E-05	0.7331E-05	0.5923E-05	0.4420E-05	0.3761E-05	0.3595E-05
41	-0.3373E-05	-0.3423E-05	-0.3512E-05	-0.3666E-05	-0.3928E-05	-0.4354E-05	-0.4957E-05	-0.5464E-05	-0.5205E-05	-0.4449E-05
43	-0.1851E-04	-0.1855E-04	-0.1859E-04	-0.1860E-04	-0.1858E-04	-0.1847E-04	-0.1822E-04	-0.1760E-04	-0.1610E-04	-0.1400E-04
45	-0.3916E-04	-0.3910E-04	-0.3892E-04	-0.3852E-04	-0.3776E-04	-0.3648E-04	-0.3455E-04	-0.3186E-04	-0.2820E-04	-0.2400E-04

I2	41	43
IY		
1	0.4593E-04	0.3601E-04
3	0.4591E-04	0.3600E-04
5	0.4588E-04	0.3597E-04
7	0.4583E-04	0.3593E-04
9	0.4575E-04	0.3587E-04
11	0.4562E-04	0.3578E-04
13	0.4543E-04	0.3563E-04
15	0.4512E-04	0.3540E-04
17	0.4462E-04	0.3504E-04
19	0.4384E-04	0.3446E-04
21	0.4258E-04	0.3356E-04
23	0.4061E-04	0.3219E-04
25	0.3769E-04	0.3034E-04
27	0.3358E-04	0.2803E-04

29	0.2800E-04	0.2484E-04
31	0.2183E-04	0.2089E-04
33	0.1672E-04	0.1683E-04
35	0.1297E-04	0.1298E-04
37	0.9050E-05	0.8869E-05
39	0.3604E-05	0.3743E-05
41	-.3537E-05	-.2594E-05
43	-.1174E-04	-.9620E-05
45	-.1988E-04	-.1626E-04

END

FILMED

10-89

DTIC